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ABSTRACT

The purpose of this study was to determine the actual tasks performed as compared to those tasks perceived as important by a selected population of postsecondary vocational-technical teachers in 40 public Texas community colleges. Prior to actual research methodology, the state-of-the-art of vocational teacher education, the competency-based movement in teacher education, and research studies in vocational teacher education were reviewed. Then a job inventory of 94 tasks was mailed to a population of 700 teachers; 461 usable responses, distributed among five vocational areas, were received. The overall finding was that differences did exist in the rated perceived importance and the percent of respondents actually performing the tasks. The report also contains a section devoted to approaches suitable for developing teacher education curriculum. Appendixes include a table of tasks ranked by mean of perceived importance; tables of the lists of 94 validated competencies for each of the five major areas, indicating percent of respondents performing the task, average time spent, and rank by percent of respondents; a table providing comparisons of ranks of tasks by perceived importance with ranks of tasks by the percentage of respondents performing the tasks; and a sample of the job inventory. (NJ)

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A SYSTEM FOR IDENTIFYING PROFESSIONAL TEACHING COMPETENCIES OF VOCATIONAL-TECHNICAL TEACHERS: A REPORT

by

Bill E. Lovelace

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PREFACE

This report has been prepared by using materials from the copyrighted study A Comparison of Perceived and Actual Tasks Performed by Selected Vocational-Technical Teachers in Texas Public Community Colleges, by Bill E. Lovelace, 1975.

The primary purpose of this report is to complete a series of research studies in Texas to identify actual tasks performed for all vocational-technical personnel.* The report also demonstrates the validity of developing vocational-technical teacher education curricula on tasks actually performed by incumbent vocational-technical personnel.

This report developed with the assistance of Deana Lusk is distributed by Educational Personnel Development Consortium D, P.O. Box 1300, Richardson, Texas, 75080.

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I. INTRODUCTION

A comparison of reports made by the Texas State Board of Education (1968:37, 1974:33, 1973:253, 1975:185) reveals an increasing need for competent post-secondary or community college vocational teachers. However, teacher preparation and improvement activities conducted by the institutions of higher education have, in the past, been directed almost exclusively toward the secondary area. In recognition of the increasing need for post-secondary vocational teachers and the inadequacy of current programs designed to meet this need, the improvement and expansion of post-secondary vocational teacher education efforts have become priorities. Institutions seeking to respond to these priorities, however, will be confronted by the many problems inherent in developing what may be perceived as a relatively new or unestablished educational field. Among the questions which must be resolved are those concerning the foundations of a curriculum which is both efficient and effective in a vocational teacher education system.

It is generally agreed that preservice teacher education curriculum may be divided into three basic areas: subject matter education (content), general education, and professional education (pedagogy). In most cases, with the exception of vocational agriculture and vocational homemaking, the approval of vocational-technical teachers in Texas had been based on the evaluation of the "successful" work experiences in the occupation which they were to teach. The evaluation of the work experiences in the occupation (vocational subject matter to be taught) has been done basically by reviewing each individual's written resume of wage earning experiences. In view of this approval process, it has become evident that the greatest curriculum concern for the preparation of and

improvement of vocational-technical teachers in community colleges is in the area of professional education.

During the past several years there has been an increased emphasis on the development of new and the revision of existing instructional programs for teacher education. Many studies and conferences have been conducted to identify strategies for development of curricula for effective preparation of teachers in professional education. The most recent movement for improvement of teacher education is that of competency- or performance-based teacher education. Concurrently with this movement, the Texas State Board of Education, on June 10, 1972, adopted new policies for approval of teacher education programs in Texas. The new policies emphasized that all teacher education programs being submitted to the State Board for approval should be competency-based. The question of what specifically constitutes a competency-based teacher education program is one, however, which has not been resolved by State Board Policy. Therefore, there is a need for agreement as to the nature of the competencies upon which such a curriculum may be developed.

Vocational teachers have long ascribed to the position that curriculum or courses of study cannot be properly developed without first doing an analysis of the occupation to be taught. Recently, the occupational analysis procedure has been granted credence as a viable technique for the development of professional education curriculum. Accordingly, Ellis and Simpson (1971:90) in discussing curriculum development in vocational teacher education reported that Robert S. Pruitt, Division of Comprehensive and Vocational Research, National Center for Education Research, Washington, D. C.:

> . . . has expressed the belief that the curriculum patterns in vocational education have implications for curriculum patterns

> in teacher education. . . .
> The first pattern is traditionally oriented in the sense that the curriculum content is based on job analysis. . . .

Further, the Department of Occupational Education and Technology, Texas Education Agency, has subscribed to the use of occupational analysis in the development of vocational teacher education programs. The Department demonstrated its belief in this concept by funding a research project in 1971 (Pope, 1972) to identify, on a questionnaire basis, the roles and functions of post-secondary vocational-technical teachers in Texas.

In summary, a clearly recognized need for improved and expanded post-secondary vocational teacher education programs exists. Approval of and support for the competency-based curriculum development approach has accompanied the recognition of this need. Further, as a result of a need for a systematic foundation for the development of competency-based teacher education curriculum, credence has been granted to the extended use of the occupational analysis technique. In keeping with these recognized needs, the central purpose of the study reported herein was to (1) determine the actual tasks performed by post-secondary vocational-technical teachers in their teaching assignments in public community colleges of Texas, and (2) compare these tasks with the ratings of tasks perceived to be important by a selected population of post-secondary vocational-technical teachers in Texas public community colleges.

In addition to reporting the study cited above, this report contains a section devoted to approaches suitable for the development of teacher education curriculum. The purpose of this additional information is to assist individuals interested in the practical application of the results of the study.

II. THE STATE-OF-THE-ART OF VOCATIONAL TEACHER EDUCATION DEVELOPMENT

As a result of several interwoven variables, the current status of vocational teacher education is that of a relatively complex, intricate system. Several variables which have influenced this situation are the existence of separate and distinct teacher education procedures for each vocational education program area, the emergence of a distinction between teacher education procedures for secondary and post-secondary vocational teachers, and the extensive recruitment of vocational teachers from occupations rather than from preservice programs with the resultant need for inservice activities.

Among these factors, one which has direct relevance to the development of vocational teacher education curriculum, is the professional preparation of vocational teachers through inservice activities.

Inservice education has been the vehicle by which vocational teachers competent in their subject area but not coming through teacher education programs have developed their professional or pedagogical skills. The need for inservice education for development of professional teaching competencies of vocational-technical teachers in public community colleges of Texas was studied by Pope (1973). The study surveyed directors and deans of vocational-technical programs in 33 public community colleges in Texas. Responses from 94 percent (31) of the directors and deans surveyed showed that they felt that teachers under their administration or supervision could benefit by professional improvement as follows:

Functional Area of Teaching	Number of vocational-technical teachers who could benefit from professional improvement
Instruction (planning, execution, evaluation)	1,350
Program Planning, Development, and Evaluation	1,042
Guidance	1,296
Management of Classroom and/or Laboratory	1,396
School-Community Relations	1,339
Professional Role and Development	1,244.

The findings of this study indicate that curriculum development for vocational teacher education must be such as to relate to the inservice as well as preservice training needs of vocational education teachers.

COMPETENCY-BASED MOVEMENT IN TEACHER EDUCATION

State level emphasis in Texas on improving teacher education by curriculum developed on the basis of teacher competencies began in 1972, when the State Board of Education recommended competency-based teacher education for all institutions in Texas with approved teacher education programs. Minutes of the Texas State Board of Education, June 10, 1972, revealed that it was the opinion of the Board that institutions of higher education in Texas with approved teacher education programs should determine what competencies should be developed by potential teachers and provide instructional activities that would develop the determined competencies.

The competency-based teacher education movement has come to mean many things to many different people. There were many different interpretations of its meaning written during the early years of the movement.

However, Weber (1973:6) gave an insight as to its general meaning with the statement:

> The term "competency-based teacher education" . . . tends to focus attention on the specification and assessment of consequence competencies as well as cognitive and performance competencies.

Ward and Jung (1968:312) were not attempting to define competency-based teacher education in their discussion of important concepts about teacher education in their predictions of what teacher education must become. Yet, one of the concepts they listed is very descriptive of competency-based teacher education.

> A viable teacher education program will center around predefined performance objectives (behavioral objectives) that lead to the competencies teachers need to function effectively in their emerging roles. This includes performance in relation to subject matter objectives, teacher strategy objectives, professional identity objectives, and personal and interpersonal objectives.

Houston and Howsam (1972:5-6) more specifically described competency-based teacher education by listing the following characteristics of competency-based instruction: (1) specification of learner objectives in behavioral terms; (2) specification of the means for determining whether performance meets the indicated criterion levels; (3) provision for one or more modes of instruction pertinent to the objectives, through which learning activities may take place; (4) public sharing of the objectives, criteria, means of assessment, and alternative activities; (5) assessment of the learning experience in terms of competency criteria; and (6) placement on the learner of the accountability for meeting the criteria.

In addition to meeting the above stated characteristics, any developer of a competency-based curriculum or program must also establish at the beginning and observe throughout the development and

implementation of the program, the definition of the terms competency and competence. Some writers use the term competency synonymously with the term task. Some establish other meanings while others make no attempts to define the two terms.

Evans, Harris, and Palmer (1975:1) have defined and observed the definition of the two terms in their development of a competency assessment system.

> The term "competence" as distinguished from "competency," refers to a demonstrated ability to perform a pattern of behaviors at some level of proficiency over a span of time. A "competency," on the other hand, is a statement describing a task relevant pattern of behaviors. Obviously, the complexity and variety of knowledges and skills included in various competency statements will vary depending on the task involved.

It has become apparent that a common factor in defining and developing competency-based teacher education programs is that all such programs must be developed on the basis of identified teaching competencies.

If this is true, the issue that arises is--what is the basis of determining what objectives should be the criteria for development of the curriculum for teacher education?

STUDIES IN VOCATIONAL TEACHER EDUCATION

Several studies have been made using various approaches or systems to develop curriculum for institutions which were implementing or planning to implement competency-based programs. By 1975, however, research in education had not contributed significantly to a scientific approach for identifying performance elements of teaching that were basic as criteria for determining objectives to be achieved by individuals who were preparing to be teachers or who were in the process of professional

improvement as teachers. The lack of research to be used for development of curricula for teacher education was emphasized by the following statements made by Rosenshine (1973:28-29):

> The results of the research, to date, are best seen as providing suggestions for future research, not future practice.
> At present, the conclusions are not ready for translation into teacher training competencies.
> The research base for building teaching competencies is extremely thin. . . .
> This lack of research on products developed by agencies other than colleges of education is distressing for a number of reasons. First, it perpetuates a familiar educational problem of develop and disseminate and let validity lie in the eye of the beholder.

Houston (1972) did an excellent job in reviewing and listing the various approaches used by colleges and universities to identify teacher competencies. Three approaches listed by Houston were "Program Translation," "Task Analysis," and "Cluster Approach." All of these approaches were common in that they were reported or derived from what could have been called perceived importance. The only real variation in the approaches was a form of task analysis referred to by Houston (1972:33) as "Role Analysis":

> TASK ANALYSIS: Sometimes referred to as role analysis, in this approach the teacher is observed in the act of teaching. These observation records are then analyzed and a teacher preparation curriculum is based on that analysis.

It is doubtful that many planners of competency-based programs use a true role analysis because of the expense and time involved.

Identifying professional competencies of vocational teachers has been treated in a number of studies. A study under the direction of Cotrell et al. (1971) was generally recognized as the most comprehensive study of competencies of vocational teachers.

In Cotrell's study the pedagogical requirements of vocational and

technical teachers were developed by making a career analysis which resulted in the identification of 390 performance elements. The performance elements were clustered in ten different functional categories listed below:

1. Program Planning, Development, and Evaluation
2. Instruction-Planning
3. Instruction-Execution
4. Instruction-Evaluation
5. Management
6. Guidance
7. School-Community Relations
8. Student Vocational Organization
9. Professional Role and Development
10. Coordination.

Cotrell studied each category to determine its relevance to: (1) a cooperative education program, and (2) an in-school secondary and post-secondary program. This resulted in the assignment of certain clusters to both or to only one of the two types of programs. The conclusion was that occupational teacher education could be divided into preparation options, an in-school preparation option, a cooperative education option, and/or a combination preparation option.

A very similar study to that done by Cotrell was completed by the Educational Personnel Development Consortium D under contract with the Department of Occupational Education and Technology of the Texas Education Agency. The rationale for this study, coordinated by Pope (1972), was based on the fact that the Vocational Education Amendments of 1968 do

not mention any of the traditional program areas; rather they speak of the training needs of people.

One major thrust of the project was to identify the teaching skills and knowledge that are common to all vocational programs and those which are unique by vocational program area in vocational-technical post-secondary programs being conducted in public community colleges in Texas. An additional thrust was to assist in the development of a model for inservice and preservice activities. The project spanned twelve months beginning July 1, 1971, through June 30, 1972.

Survey forms were distributed to seven hundred full-time post-secondary teachers in Texas community colleges. Vocational teachers of agriculture and homemaking were not included in the study. A total of 647 usable questionnaires was returned. However, of this number, 77 were coded as "other" which left a total of 570 responses for the basic five vocational program areas being surveyed. It may be noted here that the population utilized by the study reported in this paper was identical to the one utilized by Pope.

Participants were requested to rate each of three hundred performance elements on a five point scale from extremely low (rating of one) to extremely high (rating of five). The performance elements had a common stem: "I believe the successful vocational-technical teacher in my area will be able to. . . ." Respondents were cautioned that each statement in the instrument "may or may not be important to the success of a vocational-technical teacher in your area." Consequently, a sixth option for rating was provided, "not applicable," with a zero rating value. To set the frame of reference for respondents the following note was made in the directions for rating the performance elements: "You

are not rating yourself; you are rating the level of performance that you think a successful vocational-technical teacher in your assignment area should have."

The performance elements were clustered into ten performance areas: Instruction-Planning; Instruction-Execution; Instruction-Evaluation; Program Planning, Development, and Evaluation; Management; Guidance; School-Community Relations; Student Vocational Organization; Professional Role and Development; and Coordination.

Criteria for judging whether a performance element was important for a given vocational program area were established in consultation with the project task force. An item was determined by this group to be important to a program area if it met both of the following criteria:

1. the item was rated (excluding "not applicable") by 75 or more percent of the respondents in a given program area;

2. the item received a mean rating of 3.60 or higher in a given program area. Items which failed to meet one or both criteria for any vocational program area were determined not to be a common performance element (teaching activity) across all program areas. There were 149 performance elements which met the criteria across all program areas, thus establishing, based on perceived importance, a core of performance elements common to all vocational programs being conducted in public community colleges of Texas.

Miller (1971) attempted to determine the professional education competencies of vocational-technical teachers in the program areas of business education and distributive education in community colleges of California, Colorado, Oregon, and Washington. One of the implications

for teacher education that resulted from the study conducted by Miller (1971:56) was:

> The adequacy of existing teacher education programs should be viewed in terms of what instructors are actually doing in the performance of their jobs.

Further, Bjorkquist (1974) in a preliminary report of a vocational teacher education project involving 120 competencies being conducted at the University of Minnesota stated:

> For teacher education programs preparing entry level teachers we need to ask what competencies are needed to become a teacher rather than ask what competencies are possessed by an ideal teacher. Using the basic information available to us about what teachers do, we need to identify those things that they must be able to do.

DeVaughan (1974) completed a study in which competencies were rated by selected groups in Oklahoma. This study was similar to those conducted by Cotrell et al. (1971) and Pope (1972) and the survey form contained 92 teacher competencies. In addition, DeVaughan's study is another example of studies conducted on competencies needed by vocational teachers on a perceptual basis. Other studies and projects conducted for identifying and listing competencies of teachers such as the Florida Department of Education (1973) and Terry, Thompson, and Evans (1972) have been based on what educators perceive teachers should be able to do.

The vocational teacher's own perception of the importance of tasks to be mastered and knowledge to be learned is considered by many as the most important factor in determining the content of a vocational teacher education program. Thus, the teacher's perceptions of competencies (tasks) necessary to teach effectively have become the criterion for development of the teacher education curriculum. However, if we

are to be realistic in developing an improved curriculum for the professional education of vocational-technical teachers, it must be determined if the tasks teachers perceived they should be able to perform are the tasks that teachers actually perform.

According to Lewis (1973), a different approach to identifying competencies of teachers has been used by the United States Employment Service in order to write job descriptions of various jobs of teaching.

The job analysis process for determining content of instructional curriculum may be considered as being inappropriate for professional occupations by some educators. However, the following are excerpts of job information, obtained by job analyses, and disseminated by the United States Training and Employment Service (1972:236,243,270), for teachers:

> Instructs students in one or more subjects such as English, mathematics, or social studies, in private, religious, or public secondary school (high school):
> Verbal aptitude is required to read and understand textbook or other literature related to the subject matter taught; to lecture on, discuss, and explain subject matter. . . .
> Clerical perception is required to check accuracy of graph, charts, and written materials prepared as lesson aides. . . .

The job descriptions of teachers obtained from the identified competencies using a job analysis procedure are listed in the current Dictionary of Occupational Titles published by U. S. Government Printing Office, Washington, D. C. It is the philosophy of the United States Employment Service that jobs should be analyzed as they exist and that job descriptions should not be developed on the basis of what one perceives a person should be able to do in a job or occupation. In describing the concepts and principles of job analysis the United States Training and Employment Service (1972:3) stated:

> Jobs should be analyzed as they exist; therefore, each completed job analysis schedule must report the job as it exists at the time of the analysis, not as it should exist, not as it has existed in the past, and not as it exists in similar establishments.

Two categories of information are required in the job analysis procedure used by the United States Training and Employment Service. The information is categorized as "work performed" and "worker traits." The job analysis procedures used for obtaining the categories of information include observation of tasks performed by the worker, interviews with the worker, review of job descriptions, and interviews with supervisors of workers in the jobs being analyzed.

Determining the content of curriculum for training programs is one of the major areas of use for occupational information prepared by the United States Training and Employment Service using the job analysis procedure.

The United States Air Force has used a similar but different approach to that of the Department of Labor for identifying the competencies (work tasks) of Air Force personnel. The identified competencies are used by the Air Force for developing curriculum and instructional materials for training purposes. In discussing data collected by the job inventory approach used by the Air Force, Christal (1973) in a paper presented at San Diego, California, emphasized its merits:

> Finally, the fact that information is quantifiable also means that it can be validated and checked for stability using conventional statistical techniques.

The educational goals and objectives of instruction conducted by vocational teacher educators and vocational teachers of occupational programs are to prepare individuals for employment, upgrade to higher levels those who are presently employed, and assist the employed in

keeping up with technological changes. Vocational teacher educators should observe, when developing or improving vocational teacher education programs, the same principles and standards which are observed by the vocational teachers. The principles and standards that must be observed in occupational education include:

1. An occupation or job analysis is essential for determining teaching content in a program designed to prepare a person for employment.

2. The content of the curriculum is designed to develop occupational competency.

3. The curriculum in occupational education includes laboratory, classroom, and work experiences plus other activities engaged in by the learner for the purpose of achieving the learner's selected occupational objective.

Therefore, another procedure for identifying vocational teaching competencies that could be considered is the occupational analysis procedure based on task identification used by vocational teachers in developing curriculum for occupational training courses.

Research has revealed that there are definitely opportunities for improvement in the curriculum for professional preparation and improvement of all vocational-technical teachers. There is a documented need for the development of teacher education curriculum for post-secondary vocational-technical teachers in the community colleges of Texas.

A review of the competency-based teacher education movement and studies on vocational teacher education indicates that additional methods for determining competencies of vocational teachers are needed. It has been established that there are scientific methods of identifying competencies or tasks of workers and that the identified tasks

should be the basis for the development of curriculum for instructional programs.

III. IDENTIFICATION OF TEACHING TASKS OF POST-SECONDARY VOCATIONAL-TECHNICAL TEACHERS

Since there was an identified need for the development of a teacher education program for post-secondary vocational-technical teachers in Texas, a study was conducted for collecting data to be used in developing the proposed teacher education programs.

The subjects used in the study were the respondents to the research project reported by Pope (1972) Search for Common and Unique Teaching Skills and Knowledge in Occupational Education and Technology at the Post-Secondary Level. The population of the research project consisted of seven hundred full-time post-secondary vocational-technical teachers in forty Texas public community colleges. A total of 647 usable questionnaires was returned. Of this number, 77 were coded as "other" leaving a total of 570 responses distributed among the five vocational program areas being surveyed as follows: distribution and marketing occupations, 27; health occupations, 96; industrial occupations, 81; office occupations, 85; and technical occupations, 281.

Consideration was given to the use of a proportional stratified sample for the study. However, obtaining the sample on a proportioned basis across all program areas would not have provided a sufficient sample (two subjects) for the distribution and marketing program area. Krejcie and Morgan's (1970:608) Table for Determining Sample Size from a given population was used for determining the size of the sample for each vocational area.

The number in each vocational area of the population from Pope's study (1972) and size of the sample required for each vocational area are respectively: distribution and marketing occupations, 27 and 24;

health occupations, 96 and 76; industrial occupations, 81 and 66; office occupations, 85 and 70; and technical occupations, 281 and 162.

If an attempt had not been made to obtain a proportional stratified sample then a sample of 234 from the total population would have been sufficient according to Krejcie and Morgan (1970). A sample size of 162 was used in the study for technical occupations when a proportional stratified sample would have only required a sample size of 138.

The Job Inventory questionnaire used by the Department of the Air Force (1970) was selected for this study. Modification of the Department of the Air Force's Job Inventory questionnaire consisted of changing the content of background data information, heading the task inventory pages with the words "Post-Secondary Vocational-Technical Instructor's Competency List," and including the word "competency" in a way to make it synonymous with the word "task" in instructions found on each task inventory page. The modified instrument, which was a mail survey questionnaire, included ninety-four competency (task) statements with vertical columns at the right of the competency statements. The first column had the heading "Check √ If Done Now" and the second column was headed "Estimated time spent on competencies in your assignment this year." Seven ratings of estimated time were provided for the respondents to select for the amount of time which they considered was the estimated relative amount of time which was spent on each competency during the year.

SELECTION OF TASK STATEMENTS

One of the research questions to be answered by the study was "Do responses indicate a difference in the perceived importance of a task as rated by the population of post-secondary vocational-technical teachers

and the percentage of the sample who actually perform that task?" In order to answer this question it was necessary to identify the task statements found in the three hundred performance elements which were rated by the population in Pope's (1972) study.

The selection of the task statements was made by surveying twenty-eight experienced vocational educators with experiences in occupational analysis and coursemaking. The original three hundred performance elements had been organized in seven categories. An instrument, Identification of Performance Tasks of Teachers, was developed that could be used as a mail survey for selecting the tasks from the performance elements in each of the seven categories. The survey instrument contained an example of how a category of performance elements could be subdivided into tasks and subtasks. Each individual surveyed, four for each of the seven categories, was instructed to place a check "√" in the column provided beside each performance element he considered to be a task. Only the performance elements that had been checked as a task by three of the four respondents in each category were used as a task statement in the survey instrument used for the study. The survey instrument and the method used in the study were modifications of those used by the Air Force in developing job inventories and is found in Appendix II.

The method and survey instrument used by the Air Force combines features of the checklist with the features of an open-ended questionnaire and an observation interview. A mail survey was usually used to obtain occupational information on the questionnaire or "Job Inventory."

Some may have questioned the reliability of responses made on the job inventory but Morsh (1967:11) has reported that:

Test-retest reliability in reporting frequency of task performance and length of task time has been fairly satisfactory, with mean coefficients of about .70.

The task inventory method of obtaining job information used by the Air Force collects the data directly from individuals performing the job. Respondents provide the job information by checking the tasks on the inventory that each performs and then rating each task checked in terms of relative amount of time spent on the task.

To further check the reliability of the task inventory method, additional studies have been conducted. One of the studies conducted compared worker and supervisor responses to an inventory of 479 task statements. Supervisors and workers were divided into ninety-four pairs with the workers checking the task statements they performed and the supervisors checking the tasks which they felt the workers performed. Analyses of the responses by workers and supervisors resulted in the following conclusions reported by Hazel, Madden, and Christal (1964:78):

1. When compared to supervisors' estimates, there was no tendency for workers to exaggerate the number or difficulty of tasks they perform.
2. Task performance agreement defined by two indexes was higher than time-spent agreement at the task level.
3. Supervisors show higher agreement with workers on a broader or more general work level (i.e., duties), than on a more specific work level (i.e., tasks). For example, supervisor-worker agreement concerning distribution of incumbent's work time was 48 percent at the task level and 73 percent at the duty level.
4. With regard to supervisor-worker agreement on task performance, it appears that the level of agreement depends on the index used to measure agreement. Agreement on task performance was higher when computed in terms of performance or nonperformance of all tasks in the inventory (90%), than when it was computed in terms of only those tasks checked by the worker or his supervisor (57%).
5. For the specialty investigated, the generally moderate agreement (or disagreement) found between supervisors and workers concerning the nature of the worker's job suggests that a supervisor may not know precisely what any one subordinate does task by task. Since there was no tendency for

> workers to exaggerate the number or difficulty of tasks performed, the current task inventory procedure of collecting job information directly from workers seems preferable to collection of job information from supervisors.

Another study was conducted to determine the stability of data computed from job inventory survey returns and reported in consolidated job descriptions. The study was conducted by using ten previously surveyed career ladders. The cases or grouping of jobs in each career ladder were randomly divided into halves. Job descriptions were computed for each of the half samples and the percentage performing and percentage of time spent by total group vectors for each pair of job descriptions were correlated. Christal (1971:3) reported the following results:

> It was found that the vectors "percent performing" and "percent time spent by the total group" are highly stable, even for relatively small samples. Split-half reliability coefficients were generally in the middle and upper 90's.

It is concluded from the preceding studies that the job inventory method is a very feasible approach for collecting work-task information from large numbers at less cost than observation and interview methods.

When the question was asked, "Can workers be trusted to be thorough and completely honest when they fill out job inventories?" Christal (1973) answered:

> Studies have been conducted concerning this question, and I can say that the answer is definitely "Yes," at least as far as workers in the Air Force are concerned. We know that when a worker fills out an inventory on two occasions, he gives essentially the same information both times. Split-half reliabilities for information such as the percent of workers performing various tasks run from .95 to .99. Supervisors agree with the information provided by their subordinates. Information collected with daily work records is consistent with information collected with inventories. Workers do not inflate their job descriptions in terms of the number and difficulty levels of tasks they report. The work tasks reported by individuals are consistent with the information they provide in the background section concerning tools utilized and equipment worked on.

Vocational educators responsible for revising and developing occupational curricula are beginning to use the job inventory method of the Air Force. Melching and Borcher (1973) have reported that the Center for Vocational and Technical Education at Ohio State University is developing occupational curriculum using an approach that is an application of the U. S. Air Force task inventory method. The Center has developed curriculum guides in the areas of automobile mechanics, business data processing, and secretarial science using the job inventory method.

The data for the study were obtained from 461 post-secondary vocational-technical teachers in forty selected Texas public community colleges and compared to the data presented in a study by Pope (1972). The respondents of Pope's study (1972) were the population for this study which was conducted to determine what performance elements of teaching were perceived to be important by post-secondary vocational-technical teachers in forty Texas public community colleges. The post-secondary vocational-technical teachers in the study were surveyed to determine which teaching task they performed and the relative amount of time they spent on each task performed. Data presented in Tables 1 and 2 of Appendix I allows a sample comparison of the results obtained from the Pope study with those obtained from the Lovelace study in one program area. Data presented in Table 7 of Appendix I provides comparison of ranks of tasks by perceived importance with ranks of tasks by the percentage of respondents performing the tasks. Selected findings of the study from Tables 2, 3, 4, 5, 6, and 7 of the Appendix are summarized as follows:

1. There were ninety-four task statements on the survey instrument. The tasks were from the eight teaching functions of guidance, school-community relations, student vocational organizations, professional role and development, coordination, instruction, management, and program planning, development, and evaluation. All of the respondents performed one or more tasks in each of the teaching functions.

2. All ninety-four tasks on the questionnaire were performed by some respondents from each of the vocational areas of office occupations, technical occupations, and industrial occupations.

3. None of the respondents from the area of distribution and marketing occupations conducted instruction that required approved safety apparel and devices be provided to their students.

4. The respondents in the area of health occupations did not arrange with a union to make contract provisions for student-learners.

5. There were thirteen of the ninety-four tasks that were considered as unimportant by the respondents of Pope's study (1972) and were ranked 82 through 94. Only four of the thirteen tasks rated unimportant were ranked between 82 and 94 according to the percentage of respondents performing the tasks.

6. Post-secondary vocational-technical teachers of distribution and marketing occupations spent more than 50 percent of their time on only twenty-five tasks: eleven were instruction functions and seven were guidance functions.

7. Although 80 percent of the respondents of distribution and marketing occupations developed training plans for student-learners with employers, only 64 percent of the respondents of this vocational area supervised student-learner's on-the-job experience.

8. There was little similarity by observation in the ranks of tasks perceived to be important by the population of post-secondary vocational-technical teachers of distribution and marketing occupations and the ranks of tasks performed by the respondents of the sample of post-secondary vocational-technical teachers of distribution and marketing.

9. The post-secondary vocational-technical respondents of office occupations spent 51 percent of their time on twenty tasks. Of these twenty tasks there were thirteen in the function of instruction on

which the performing respondents spent an average of 32 percent of their time.

10. The performing respondents of office occupations spent more time preparing lesson plans than any other task in the function of instruction.

11. While 85 percent of the respondents of office occupations developed courses of study only 43.67 percent of the respondents of office occupations made a job analysis for determining the instructional content in the course taught.

12. There was an observable difference between the tasks ranked according to their perceived importance by the population of post-secondary vocational-technical teachers of office occupations and the tasks ranked according to the percentage of respondents of office occupations performing the tasks.

13. In the area of office occupations there were twenty-three of the ninety-four tasks which had similar rankings according to the percentage of respondents performing and the perceived importance as rated by the population.

14. More respondents in the area of technical occupations were involved in acquiring new occupational skills than there were in any other vocational-technical area in the study.

15. The respondents of technical occupations performed twenty-three tasks which consumed an average of 50.785 percent of their time. Of these twenty-three tasks, fifteen were in the function of instruction.

16. The task of placing students on the job was performed by 11 percent of the respondents of technical occupations.

17. There was a difference in the rankings of tasks by perceived

importance and the rankings of tasks by the percentage of respondents performing the task in the area of technical occupations.

18. The eleven tasks in the function of guidance were performed by 61 percent of the respondents of industrial occupations.

19. The project or job method of teaching occupations was used by 98.39 percent of the respondents of industrial occupations.

20. The respondents of industrial occupations spent more time on the management tasks than did the respondents from any other vocational-technical area.

21. There was a difference in the perceived importance of tasks as rated by the population of industrial occupations and the percentage of the respondents of industrial occupations who performed the tasks.

22. The health occupations respondents spent an average of 49.725 percent of their time on the twenty-two instructional tasks listed on the job inventory.

23. The development of original instructional materials was done by 87.50 percent of the health occupations respondents.

24. The lecture was used by a greater number respondents of health occupations than any other method of teaching listed on the job inventory questionnaire.

25. The greatest percentage of the 461 respondents performing a task was 96.86 percent. A regard for and an interest in the students as individuals was demonstrated by 96.86 percent of the responding post-secondary vocational-technical teachers.

26. Original instructional materials were developed by 91.35 percent of the total respondents from all five program areas.

27. The performing respondents from all five vocational-technical

program areas surveyed spent an average of 39.269 percent of their time performing tasks of an instructional function.

28. The function of guidance consumed an average of 17.86 percent of time of all of the performing respondents from all five program areas.

29. Classroom and laboratory management tasks accounted for an average of 17.27 percent of the time spent by the performing members of the 461 respondents.

30. The percentage of the 461 respondents performing the ninety-four tasks ranged from a high of 96.86 percent to a low of 3.61 percent.

31. There was a distinct difference across all program areas between the ranks by perceived importance and the ranks by the percentage of respondents performing seventy-four of the ninety-four tasks.

32. The area of distribution and marketing had a greater number (seventy-nine) of tasks for which there was a difference between the rank by perceived importance and the rank by the percentage of respondents performing the task than did any of the other four areas.

33. The area of technical occupations had fewer tasks (sixty-seven) for which there was a difference between the rank by perceived importance and the rank by the percentage of respondents performing the task than did any of the other four areas.

Findings from the study have provided a list of validated professional tasks (competencies) performed by post-secondary vocational-technical teachers in Texas public community colleges. The findings have also provided the average percentage of time spent by the performing respondents on each of the ninety-four validated tasks by each program area and across all program areas. The findings in no way provided any indication of how well and in what manner the tasks were

performed by the respondents. Based on the theories of occupational curriculum development, it was found that the list of actual tasks performed and presented in this study completed the first step, occupational analysis, in occupational curriculum development.

Data presented in Table 7 provided comparisons of ranks of tasks by perceived importance with ranks of tasks by the percentage of respondents performing the tasks. Allowing for an approximate 10 percent variance for a rank order of 1 to 94 would establish a variance of five ranks above and five ranks below a specific rank. The following comparisons with a 10 percent variance in ranks are described for each of the program areas and for each of the program areas across all programs.

1. There were twenty tasks which were paired (21 percent of the ninety-four tasks) across all five program areas. They are considered as paired since there was not any difference, by task, in the rank of perceived importance and the rank of the percentage of respondents performing within the established variance. Task number 72 had the same rank of 1 for both of the compared ranks.

2. For the distribution and marketing occupations area, fifteen of the tasks (17 percent) were paired within the 10 percent variance for both of the compared ranks (perceived importance and percentage of respondents responding). Of these fifteen tasks, two tasks compared with no variation. Task number 6 was ranked 84 by both comparisons and task number 62 was ranked 76 by both comparisons.

3. In the area of office occupations there were five tasks of the twenty-five paired tasks within the 10 percent variance that had paired equal ranks. The five tasks are numbers 72 (ranked 1), 37

(ranked 73), 6 (ranked 76), 57 (ranked 55), and 93 (ranked 91).

4. There were 29 percent (twenty-seven) of the ninety-four tasks in technical occupations that were observed as paired ranks within the 10 percent variance. Four of the twenty-seven paired tasks had equal ranks.

5. The area of industrial occupations had the second lowest number of tasks with paired ranks of any program area. Of these twenty paired ranks, three had equal ranks.

6. The paired ranks, based on the 10 percent variance for the area of health occupations, consisted of twenty-one tasks of which three were paired by equal ranks.

7. An analysis was made to determine how many of the ranks by the percentage of respondents performing by each program area were paired, within the 10 percent variance, with the ranking of perceived importance across all five program areas. The results were that five tasks ranked by the percentage of respondents performing in four of five program areas were paired with the rank of the perceived importance across all program areas. The tasks which paired under this observation were numbers 22, 77, 25, 85, and 93.

CONCLUSIONS

A number of conclusions may be drawn from the findings of the study of tasks or competencies performed by post-secondary vocational-technical teachers in Texas public community colleges. The considered judgment of the respondents regarding the tasks they perform and the relative amount of time spent on each task is an approach to the development of curriculum for effective teacher education programs to prepare or improve professionally competent personnel. The following, some of which are in terms of research questions in the study, are specific conclusions resulting from this endeavor.

1. The Job Inventory containing the ninety-four professional education tasks was a satisfactory method of securing data for the study.

2. The responses indicated that there was a difference in the perceived importance of the tasks as rated by the population and the percentage of the respondents who performed the tasks.

3. There was a difference, by rank in each vocational program area, between the perceived importance of the tasks rated by the population and the percentage of respondents performing the tasks.

4. There was an observable difference in the percentage of respondents performing each task among the vocational program areas.

5. There was a difference between ranks of the average percentage of time spent by the respondents on the task performed and the ranks of perceived importance, as rated by the population, of the tasks.

6. The perceived importance of what competencies a vocational-technical teacher should be able to perform is not indicative of what competencies are actually performed by vocational-technical teachers.

7. Conclusions in reference to the state-of-the-art and findings of the study indicate that an effective curriculum of teacher education for post-secondary vocational-technical teachers can be developed based on the tasks performed by the teachers.

RECOMMENDATIONS

The following recommendations in the study were listed for consideration:

1. Since the study did find differences in the rated perceived importance of the ninety-four tasks and the percentage of the respondents performing the tasks, it was suggested that the professional teacher education curriculum be revised or developed using an occupational analysis procedure based on professional tasks performed by practicing teachers, the percentage of the teachers performing the tasks, and the relative amount of time spent on each task.

2. In order to provide more information needed to improve and develop curriculum for professional teacher education, it was suggested that a study be conducted to determine the complexity and criticality of each of the ninety-four tasks found in this study.

3. Finally, it was recommended that a causal-comparative study be conducted to determine what factors influenced the responses of the 461 post-secondary vocational-technical teachers surveyed in this study.

IV. APPROACHES FOR DEVELOPING CURRICULUM FOR TEACHER EDUCATION

The purpose of this section of the report is to assist in the development of a process for applying study results. Approaches utilized in developing teacher education curriculum are briefly discussed and one recommended approach is presented with some detail.

The efforts to improve teacher education have in most cases been made through fragmented and isolated approaches that have not provided for coordination of the user, the curriculum, and the organizational structure. This concern was amplified by Allen (1969:15):

> The point is that teacher training, curriculum, and the organizational structure of schools are all very closely interrelated, and that any attempt to implement an innovation in one of the three areas required close attention to one and modification of the other two. Furthermore, the current structure of the school wherein actions take place at the university rather than at the school itself, makes it virtually impossible for the collaboration between these three areas to occur.

It is evident that an effective approach for developing curriculum for teacher education programs must be established, an approach that will include or be based on a viable and acceptable procedure of identifying teacher competencies. The need for new and effective approaches to the development of curriculum for teacher education was emphasized by Combs (1970:1):

> To plan effective programs we need the very best definitions of good teaching we can get. That seems clear enough. How to arrive at such definitions, however, has proven a most difficult problem. Despite millions of dollars and millions of man hours poured into research on the problem over the past fifty years, the results have continued to be frustrating and disappointing--until recently.
>
> It now appears that our failure to find useful definitions may be due to the fact that we have been looking for answers in the wrong places.

Although the stated goals of education are long-range and involve human behaviors and aspirations that are complex, there must be

specifications for these goals. The specifications which must involve both ethical and philosophical considerations must be developed from a procedure or system--a system for modification of behaviors through instruction that is based on validated competencies and specifically stated objectives. What procedure, what system, what approach should be used to improve the curriculum for the area of professional development or improvement in vocational teacher education?

The previously cited approaches for identification of competencies listed by Houston (1972) are also, by the same description, approaches used by program designers as the system for developing the curriculum for competency-based or performance-based teacher education. These range from the "Program Translation" approach to the "Cluster Approach." In the translation approach the staff or program designers rewrote current requirements of the course as behavioral objectives of each course in the curriculum.

In the cluster approach the program planners selected the curriculum areas to be taught and changed them to instructional statements which were reduced to statements written in terms of behavioral objectives. The cluster approach is somewhat similar to an instructional analysis. However, an instructional analysis is always preceded by an occupational or job analysis. The occupational analysis has not been used in the cluster approach.

The Department of the Air Force (1970:1-2) has developed an approach or system for developing curriculum for instruction that appears to have included the best components of all approaches or systems in the literature reviewed. The system is developed on the rationale that:

Education and training personnel have traditionally approached

the task of curriculum planning and development in a logical and organized manner; that is, systematically. Being systematic, however, is not the same thing as applying a systems approach.

It appears that the basic difference in the systems approach used by the Air Force and educators is two procedures included in the approach used by the Air Force and not used by educators. The two procedures are: (1) the objectives or requirements of personnel to be prepared are derived from an analysis of the operational system to be supported by the personnel and (2) the curriculum for the instructional program is based on actual tasks performed derived from an analysis of the occupation for which the personnel are being prepared.

The design used by the Department of the Air Force to develop instructional programs, with minor modifications (educational terms are substituted for military terms), is illustrated in Figure 1, page 35 and described in part below.

The first step in planning and developing an instructional program is the analysis of the requirements of the system that will use the products of the program. In the case of a vocational teacher education program it is necessary to analyze the instructional system in which the teachers are presently teaching or preparing to teach. This analysis is essential since the teaching functions performed by the teachers are created by the requirements of the instructional system.

An analysis is made to obtain data to describe the system:

- Its purpose or objective
- The functions required to achieve the objective
- The teacher's responsibilities in the system
- The components or subsystem in the system
- Materials and equipment required to support system
- Established procedures for operation of the system

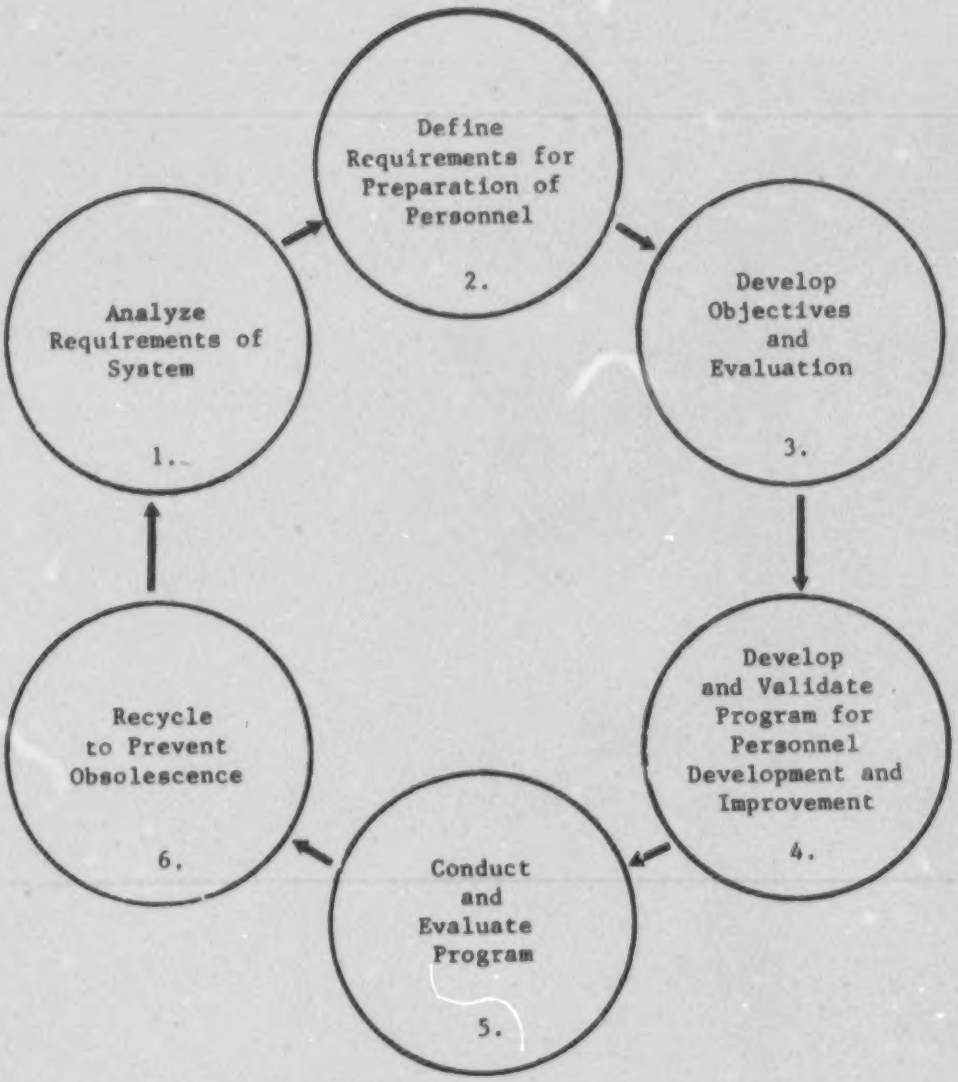

Figure 1

Human Resources Development System

- The effects of environmental factors on operation and maintenance of the system.

The basis for planning and developing a curriculum for the system is the tasks performed in operating, maintaining, and supporting that system. The personnel of the system forms the starting point for identifying job performance requirements and standards. The analysis of the instructional system will provide developmental data for:

- Performance and design requirements
- System equipment and personnel functions
- Equipment and facilities required to support system operation and maintenance
- Human (job) performance requirements
- Personnel, training, training equipment, and technical requirements.

Planning data needed by the developer that will be provided by the analysis includes data for:

- Stating purpose or objective of system
- Identification of user
- Management responsibilities of user.

The accurate identification of the human tasks that are required to operate, maintain, and support the system is vital to the planning and development of the instructional program. The tasks performed by the personnel in the instructional system are the job performance requirements of the system. The job performance requirements are obtained from a job inventory of tasks and determining job performance standards. Defining the job performance requirements or tasks provide specifications of:

WHAT is to be done

WHY it is to be done

WHEN it is to be done

WHERE it is to be done

WHO is to do it

HOW it is to be done

HOW WELL it is to be done.

Every effort must be made to insure that the documentation of job requirement data is provided for the developers of the curriculum used in preparing personnel for the system. In some cases the system may be hardware oriented. Therefore, a job requirements worksheet may be used. Some may refer to this as a task analysis worksheet. Regardless of the heading used on the worksheet it provides documentation of the job requirement data. The worksheet includes the following types of data:

- List all tasks required to carry out duty or function
- List all equipment needed to carry out task
- List all materials needed for completion of task
- Describe physical environment such as classroom, laboratory, or industrial site
- From what source(s) was information for task taken.

The analysis of the job requirements will:

Provide data for:

- Determining qualitative and quantitative requirements for improvement and/or preparation of personnel
- Translating duty and task data into instructional objectives, instructional standards, and criterion-referenced evaluation

. Continuous updating of job requirements

and will:

. Identify all tasks, equipment, and materials needed to do the job

. List the conditions under which the tasks are to be performed

. Emphasize unique duties and tasks to describe the nature of the work.

Following the determination of the job requirements of the personnel to be trained, the next step in the system is to define the education or training requirements. This is necessary in order to make the decision of what is to be taught in the system or what is the content of the curriculum. By defining the educational requirements the decision makers will be able to:

. Develop instructional standards

. Select method(s) for preparing personnel

. Identify factors affecting selected methods

. Identify resources.

The instructional standards are used to standardize and control instruction. The standards list, by means of task and knowledge statements, identifies instruction needed to prepare personnel for job performance. This listing of instructional standards is used to:

. Develop formal courses

. Prepare learning objectives, instructional materials, and evaluation criterion

. Establish internships and practicums

. Perform follow-up on graduates.

The instructional standards are developed by:

1. Identifying quantitative requirements
   - Personnel performing task
   - Relative importance of task
2. Determining qualitative requirements
   - Frequency of task performance
   - Learning difficulty
   - Interval between training and use
   - Prior experiences of trainees.

The course of instruction is developed with objectives based directly on the task analyses and knowledge statements derived from the job performance requirements which have been incorporated in the instructional standards. The process by which the task statements in the instructional standards are translated into instructional objectives is that of instructional analysis. Tasks and subtasks are examined during this process from an instructional position to provide the following information:

- Principles and theory necessary to transfer of training
- Necessity of prerequisite knowledge in other areas
- Attitudes necessary to future performance by learner
- Terminology unique to instruction and learning
- Equipment, tools, and materials essential to instruction and learning
- Teaching tactics complementary to behavior being taught.

The process of grouping and examining for commonality the information obtained from instructional analysis allows for the translation of job

requirements into instructional objectives with evaluation criteria. Further, instructional analysis provides information as to the techniques or tactics most effective in the instructional situation as well as the minimum instructional equipment, tools, or materials necessary.

After the instructional analysis has been completed, the developer can proceed to the development of behavioral objectives in terms of what a student must know and do.

From the instructional analysis the behavioral objectives are identified and written as criterion objectives or as enabling objectives. The task/knowledge statements may be composed of both criterion and enabling objectives. In addition, based on the level of difficulty, what is a criterion objective in one sequence of instruction may become an enabling objective in another sequence of difficulty for a task/knowledge statement. Therefore, there is support for the concept that both types of objectives should be criterion referenced; or in other terms, they should be written in performance terms for instructional purposes. The performance or criterion referenced objective will be written with the conditions and standards specifically stated which will be used for measuring the achievement of the objective. Following the writing of the performance (criterion referenced) objectives the development of the curricula and materials follows the usual procedure of course development.

The remaining decisions to be made for implementation of the instructional program are:

. Facilities

. Materials and equipment

. Personnel

- Funding
- Formal courses of instruction
  - Existing courses
  - Revised courses
  - New courses
- Workshops and institutes
  - For updating
- Cooperative internship or practicum
- Number of personnel to be prepared
- Characteristics of population to be prepared
- Time requirement
- Availability of qualified teacher educators
- Equipment and facilities
- Availability of data
- Institutional requirements
- Costs.

Many teacher educators may be hesitant to implement this system or a modification of this system for development of vocational-technical teacher education curricula. However, it has been proven to be one of the most validated and accountable of all systems for instructional development. The system should be studied in depth by all who have a responsibility for developing and implementing vocational-technical curricula, especially in the area of teacher education.

Curricula for vocational-technical teacher education being developed using this system in Texas includes program areas of vocational home-making, vocational office education, occupational orientation at the secondary level and the industrial and technical areas at the post-secondary level.

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VI. APPENDICES

APPENDIX I

TABLES 1-7

Table 1

Tasks Ranked by Mean of Perceived Importance as Rated by Post-Secondary Vocational-Technical Teachers of Distribution and Marketing Occupations

*Tied Ranks

Rank	Mean	Task Number	Task Statement
1	4.42	23	evaluate student-learner's work qualities, personal traits, and progress on the job.
2	4.41	72	demonstrate a regard for and an interest in the students as individuals.
3	4.31	78	present information to students on post-high school training and education opportunities available to them.
4	4.30	70	develop constructive working relationships among students.
5	4.27	42	identify textbook, reference and other instructional material.
6*	4.23	77	present information to students on employment opportunities.
6*	4.23	94	obtain from advisory committee information on ways to improve related instruction and on-the-job training.
8*	4.19	5	acquire new occupational skills needed to keep pace with technological advancement in your teaching field.
8*	4.19	19	establish criteria for evaluating student performance.
8*	4.19	39	develop a course of study.
8*	4.19	61	uphold acceptable standards of student behavior in vocational classrooms and laboratories.
8*	4.19	87	assess training capability of the prospective training station.

Table 1 (continued)

Rank	Mean	Task Number	Task Statement
8*	4.19	88	assess education adequacy of a prospective training station's facilities and equipment.
14*	4.15	21	formulate a system of grading consistent with school policy.
14*	4.15	38	make a job analysis for determination of instructional content in the course taught.
14*	4.15	48	provide students with opportunities to apply new information while under supervision of instructor.
14*	4.15	71	encourage students to discuss career aspirations.
14*	4.15	74	assist students in determining ways to best describe their saleable skills.
14*	4.15	75	work with other teachers and counselors to help students with individual problems.
20*	4.12	31	assist in the identification of the vocational education purposes and objectives for the school.
20*	4.12	83	match a student-learner's unique characteristics with an appropriate training station.
20*	4.12	84	select student-learner training stations.
20*	4.12	86	establish criteria to evaluate and approve training stations.
20*	4.12	91	supervise student-learner's on-the-job experience.
25*	4.11	24	devise self-evaluation techniques for use by students.
25*	4.11	34	assist in writing general objectives for courses offered in the vocational education program.

Table 1 (continued)

Rank	Mean	Task Number	Task Statement
25*	4.11	89	assess safety provision of facilities and equipment of the prospective training stations.
28*	4.08	28	collect occupational data from employers to identify occupational standards.
28*	4.08	44	conduct field trips.
30*	4.07	16	consult advisory committee to obtain information concerning their expectations of the vocational program.
30*	4.07	33	identify the competencies needed for entry into an occupation.
30*	4.07	53	give an illustrated talk.
30*	4.07	81	provide prospective student-learners with resource materials on occupational opportunities to aid them in selecting a vocation.
34	4.05	11	maintain liaison with union officials and employers.
35*	4.04	2	promote the attainment of the goals and objectives of the teaching profession.
35*	4.04	7	provide displays in the school and in the community on the vocational program.
35*	4.04	22	appraise students' performance in relation to performance objectives.
35*	4.04	32	analyze occupations with assistance of employers and labor representatives.
35*	4.04	46	teach lesson using conference technique.
35*	4.04	58	supply administrators with data for vocational reports required by the state department of education.

Table 1 (continued)

Rank	Mean	Task Number	Task Statement
35*	4.04	79	assist students in securing and in filling out applications for jobs, scholarships, education loans, or college admission.
35*	4.04	80	establish criteria for selection of student-learners.
43*	4.00	4	evaluate your personal and professional abilities and limitations.
43*	4.00	30	plan the annual agenda to be considered by the advisory committee.
43*	4.00	50	provide instruction so that students can progress at own rate of speed.
43*	4.00	90	develop systematic training plan and agreement.
47*	3.96	1	identify current trends of the teaching profession.
47*	3.96	29	identify the role and function of the advisory committee.
47*	3.96	82	identify a prospective student-learner on basis of selection criteria and data.
50*	3.93	8	direct student presentations describing activities of the vocational program.
50*	3.93	14	obtain informal feedback on the vocational program through contacts with individuals in the school and community.
50*	3.93	67	direct students in a system for cleaning and maintaining the vocational laboratory.
53*	3.92	40	determine group and individual learning experiences for the unit based on individual differences of students.
53*	3.92	43	develop original instructional materials.
53*	3.92	49	obtain summary for a lesson.

Table 1 (continued)

Rank	Mean	Task Number	Task Statement
53*	3.92	92	develop a training plan for student-learner with employer.
57*	3.89	20	develop criterion test.
57*	3.89	73	interpret occupational tests and inventories to students.
59*	3.88	26	identify the geographical area in which an occupational survey will be conducted.
59*	3.88	36	maintain continual follow-up information on placement, employment, and training status of each graduate of the vocational program.
59*	3.88	57	structure a filing system for records and report forms used in a vocational course.
62*	3.85	9	conduct an open house to familiarize members of the school and community with activities of the vocational program.
62*	3.85	13	analyze enrollment trends to determine student and parent acceptance of the vocational program.
62*	3.85	47	teach lesson by the project or job method.
62*	3.85	68	arrange layout of vocational laboratory to simulate or duplicate occupational environment.
62*	3.85	76	establish communication patterns for exchanging information and for cooperating with the guidance counselor.
67*	3.83	25	organize a steering committee to assist in the preplanning activities of an occupational survey.
67*	3.83	27	appoint and involve advisory committee in conducting an occupational survey.
67*	3.83	64	arrange for the storage and security of vocational supplies and equipment.

Table 1 (continued)

Rank	Mean	Task Number	Task Statement
67*	3.83	66	schedule laboratory equipment for maximum utilization by students.
71*	3.81	35	write student performance goals for vocational education courses.
71*	3.81	55	plan an operating budget proposal for consumable supplies, services, and materials needed in a vocational course.
73*	3.78	52	give a lecture.
73*	3.78	56	prepare purchase request for approved vocational equipment and supplies.
75	3.77	41	prepare a lesson plan.
76	3.75	62	maintain an inventory of vocational tools, supplies, and equipment assigned to the laboratory.
77	3.73	54	prepare a capital outlay budget proposal for new equipment needed in a vocational course.
78	3.72	37	disseminate a summary of the vocational education evaluation to administrators, advisory committee members, and the board of education.
79	3.67	18	assist in planning the overall objectives of the total school program.
80*	3.63	69	determine students' background and environment.
80*	3.63	85	arrange with a union to make contract provision for student-learners.
82	3.58	17	acquire information from members of the community power structure regarding their expectations of the vocational program.
83	3.53	65	implement student "check-out" procedures for tools, supplies, and equipment used in the vocational laboratory.

Table 1 (continued)

Rank	Mean	Task Number	Task Statement
84	3.50	6	supervise student teachers.
85	3.47	59	provide approved safety apparel and devices for vocational students assigned to hazardous equipment.
86	3.46	93	sponsor employer/student-learner banquet for the vocational program.
87*	3.41	3	participate in experimental and other data collecting research activities.
87*	3.41	12	conduct opinion surveys in the school and community concerning the vocational program.
89	3.33	45	provide students with opportunities to become experienced in manipulative skills.
90	3.24	51	teach a demonstration lesson.
91	3.17	10	sponsor student-parent activities for the vocational program.
92	3.11	60	maintain a record of safety instruction presented in compliance with safety laws and regulations.
93*	3.00	15	obtain information from parents relative to their expectations of the vocational program.
93*	3.00	63	establish a system for repairing and servicing tools and equipment in a vocational laboratory.

Table 2

Analysis of Tasks Performed by Twenty-five Post-Secondary Vocational-Technical Teachers of Distribution and Marketing Occupations

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
4.	evaluate your personal and professional abilities and limitations.	96.00	1.708	1.639	1.639	1*
14.	obtain informal feedback on the vocational program through contacts with individuals in the school and community.	96.00	1.877	1.802	3.441	1*
19.	establish criteria for evaluating student performance.	96.00	1.961	1.882	5.323	1*
42.	identify textbook, reference, and other instructional material.	96.00	2.031	2.031	7.354	1*
52.	give a lecture.	96.00	2.102	2.018	9.372	1*
72.	demonstrate a regard for and an interest in the students as individuals.	96.00	2.459	2.459	11.831	1*
75.	work with other teachers and counselors to help students with individual problems.	96.00	1.879	1.804	13.635	1*
21.	formulate a system of grading consistent with school policy.	92.00	1.773	1.773	15.408	8*
22.	appraise students' performance in relation to performance objectives.	92.00	2.070	1.904	17.312	8*
23.	evaluate student-learner's work qualities, personal traits, and progress on the job.	92.00	2.003	1.842	19.154	8*

*Tied Ranks

Table 2 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
43.	develop original instructional materials.	92.00	2.119	1.949	21.103	8*
70.	develop constructive working relationships among students.	92.00	2.234	2.055	23.158	8*
71.	encourage students to discuss career aspirations.	92.00	2.316	2.316	25.474	8*
39.	develop a course of study.	88.00	1.959	1.724	27.198	14*
41.	prepare a lesson plan.	88.00	1.892	1.665	28.863	14*
46.	teach lesson using conference technique.	88.00	1.931	1.699	30.562	14*
69.	determine students' background and environment.	88.00	1.958	1.723	32.285	14*
77.	present information to students on employment opportunities.	88.00	1.936	1.936	34.221	14*
11.	maintain liaison with union officials and employers.	84.00	1.779	1.494	35.715	19*
16.	consult advisory committee to obtain information concerning their expectations of the vocational program.	84.00	1.553	1.305	37.020	19*
34.	assist in writing general objectives for courses offered in the vocational education program.	84.00	1.945	1.634	38.654	19*
61.	uphold acceptable standards of student behavior in vocational classrooms and laboratories.	84.00	1.973	1.657	40.311	19*

Table 2 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
76.	establish communication patterns for exchanging information and for cooperating with the guidance counselor.	84.00	1.979	1.663	41.974	19*
79.	assist students in securing and in filling out applications for jobs, scholarships, education loans, or college admission.	84.00	1.733	1.455	43.429	19*
1.	identify current trends of the teacher profession.	80.00	1.401	1.121	44.641	25*
5.	acquire new occupational skills needed to keep pace with technological advancement in your teaching field.	80.00	1.887	1.510	46.151	25*
35.	write student performance goals for vocational education courses.	80.00	1.914	1.531	47.682	25*
48.	provide students with opportunities to apply new information while under supervision of instructor.	80.00	2.172	1.738	49.420	25*
53.	give an illustrated talk.	80.00	1.747	1.397	50.817	25*
78.	present information to students on post-high school training and education opportunities available to them.	80.00	1.881	1.505	52.322	25*
87.	assess training capability of the prospective training station.	80.00	1.750	1.400	53.722	25*
92.	develop a training plan for student-learner with employer.	80.00	2.108	1.687	55.409	25*

Table 2 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
17.	acquire information from members of the community power structure regarding their expectations of the vocational program.	76.00	1.600	1.216	56.625	33*
33.	identify the competencies needed for entry into an occupation.	76.00	1.753	1.333	57.958	33*
40.	determine group and individual learner experiences for the unit based on individual differences of students.	76.00	1.883	1.431	59.389	33*
47.	teach lesson by the project or job method.	76.00	1.948	1.480	60.869	33*
55.	plan an operating budget proposal for consumable supplies, services, and materials needed in a vocational course.	76.00	1.561	1.186	62.055	33*
58.	supply administrators with data for vocational reports required by the state department of education.	76.00	1.358	1.032	63.087	33*
74.	assist students in determining ways to best describe their saleable skills.	76.00	1.828	1.389	64.476	33*
13.	analyze enrollment trends to determine student and parent acceptance of the vocational program.	72.00	1.494	1.076	65.552	40*
20.	develop criterion test.	72.00	1.669	1.202	66.754	40*
29.	identify the role and function of the advisory committee.	72.00	1.392	1.002	67.756	40*

Table 2 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
90.	develop systematic training plan and agreement.	72.00	2.085	1.501	69.257	40*
2.	promote the attainment of the goals and objectives of the teaching profession.	68.00	1.776	1.207	70.464	44*
30.	plan the annual agenda to be considered by the advisory committee.	68.00	1.424	0.968	71.432	44*
80.	establish criteria for selection of student-learners.	68.00	1.613	1.097	72.529	44*
81.	provide prospective student-learners with resource materials on occupational opportunities to aid them in selecting a vocation.	68.00	1.634	1.111	73.640	44*
24.	devise self-evaluation techniques for use by students.	64.00	1.415	0.906	74.546	48*
31.	assist in the identification of the vocational education purposes and objectives for the school.	64.00	1.380	0.883	75.429	48*
50.	provide instruction so that students can progress at own rate of speed.	64.00	1.723	1.103	76.532	48*
51.	teach a demonstration lesson.	64.00	1.815	1.161	77.693	48*
57.	structure a filing system for records and report forms used in a vocational course.	64.00	1.545	0.989	78.682	48*
86.	establish criteria to evaluate and approve training stations.	64.00	1.644	1.052	79.734	48*

Table 2 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
91.	supervise student-learner's on-the-job experience.	64.00	1.984	1.270	81.004	48*
3.	participate in experimental and other data collecting research activities.	60.00	1.010	0.606	81.610	55*
18.	assist in planning the overall objectives of the total school program.	60.00	1.436	0.861	82.471	55*
49.	obtain summary for a lesson.	60.00	1.820	1.092	83.563	55*
56.	prepare purchase request for approved vocational equipment and supplies.	60.00	1.428	0.857	84.420	55*
84.	select student-learner training stations.	60.00	1.831	1.099	85.519	55*
54.	prepare a capital outlay budget proposal for new equipment needed in a vocational course.	56.00	1.368	0.766	86.285	60*
82.	identify a prospective student-learner on basis of selection criteria and data.	56.00	1.389	0.778	87.063	60*
83.	match a student-learner's unique characteristics with an appropriate training station.	56.00	1.744	0.976	88.039	60*
7.	provide displays in the school and in the community on the vocational program.	52.00	1.172	0.609	88.648	63*
12.	conduct opinion surveys in the school and community concerning the vocational program.	52.00	1.145	0.595	89.243	63*

Table 2 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
28.	collect occupational data from employers to identify occupational standards.	52.00	1.526	0.793	90.036	63*
88.	assess educational adequacy of a prospective training station's facilities and equipment.	52.00	1.664	0.865	90.901	63*
94.	obtain from advisory committee information on ways to improve related instruction and on-the-job training.	52.00	1.258	0.654	91.555	63*
37.	disseminate a summary of the vocational education evaluation to administrators, advisory committee members, and the board of education.	48.00	1.397	0.670	92.225	68*
44.	conduct field trips.	48.00	1.269	0.609	92.834	68*
9.	conduct an open house to familiarize members of the school and community with activities of the vocational program.	44.00	1.264	0.556	93.390	70*
32.	analyze occupations with assistance of employers and labor representatives.	44.00	1.255	0.552	93.942	70*
36.	maintain continual follow-up information on placement, employment, and training status of each graduate of the vocational program.	44.00	1.650	0.726	94.668	70*
73.	interpret occupational tests and inventories to students.	44.00	1.454	0.640	95.308	70*

Table 2 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
38.	make a job analysis for determination of instructional content in the course taught.	40.00	1.447	0.579	95.887	74*
45.	provide students with opportunities to become experienced in manipulative skills.	40.00	1.991	0.797	96.684	74*
8.	direct student presentations describing activities of the vocational program.	32.00	1.498	0.479	97.163	76*
62.	maintain an inventory of vocational tools, supplies, and equipment assigned to the laboratory.	32.00	1.404	0.449	97.612	76*
89.	assess safety provision of facilities and equipment of the prospective training stations.	32.00	1.253	0.401	98.013	76*
64.	arrange for the storage and security of vocational supplies and equipment.	28.00	1.290	0.361	98.374	79
26.	identify the geographical area in which an occupational survey will be conducted.	24.00	0.988	0.237	98.611	80*
27.	appoint and involve advisory committee in conducting an occupational survey.	24.00	1.094	0.263	98.874	80*
15.	obtain information from parents relative to their expectations of the vocational program.	20.00	1.359	0.272	99.146	82*
25.	organize a steering committee to assist in the preplanning activities of an occupational survey.	20.00	1.204	0.241	99.387	82*

Table 2 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
6.	supervise student teachers.	12.00	0.820	0.098	99.485	84*
10.	sponsor student-parent activities for the vocational program.	12.00	0.708	0.085	99.570	84*
85.	arrange with a union to make contract provision for student-learners.	12.00	0.730	0.088	99.658	84*
68.	arrange layout of vocational laboratory to simulate or duplicate occupational environment.	8.00	1.172	0.094	99.752	87*
93.	sponsor employer/student-learner banquet for the vocational program.	8.00	1.068	0.085	99.837	87*
60.	maintain a record of safety instruction presented in compliance with safety laws and regulations.	4.00	0.893	0.036	99.873	89*
63.	establish a system for repairing and servicing tools and equipment in a vocational laboratory.	4.00	1.223	0.049	99.922	89*
65.	implement student "check-out" procedures for tools, supplies, and equipment used in the vocational laboratory.	4.00	1.702	0.068	99.990	89*
66.	schedule laboratory equipment for maximum utilization by students.	4.00	1.223	0.049	100.039	89*
67.	direct students in a system for cleaning and maintaining the vocational laboratory.	4.00	1.223	0.049	100.088	89*
59.	provide approved safety apparel and devices for vocational students assigned to hazardous equipment.	0	0.0	0.0	100.088	94

Table 3

Analysis of Tasks Performed by Seventy-five Post-Secondary Vocational-Technical Teachers of Office Occupations

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
72.	demonstrate a regard for and an interest in the students as individuals.	97.33	3.052	3.011	3.011	1
41.	prepare a lesson plan.	94.67	2.777	2.664	5.675	2
22.	appraise students' performance in relation to performance objectives.	93.33	2.778	2.628	8.303	3
42.	identify textbook, reference, and other instructional material.	92.00	2.459	2.293	10.596	4*
75.	work with other teachers and counselors to help students with individual problems.	92.00	2.402	2.239	12.835	4*
19.	establish criteria for evaluating student performance.	90.67	2.487	2.285	15.120	6*
71.	encourage students to discuss career aspirations.	90.67	2.376	2.183	17.303	6*
52.	give a lecture.	89.33	2.323	2.103	19.406	8*
77.	present information to students on employment opportunities.	89.33	2.353	2.130	21.536	8*
50.	provide instruction so that students can progress at own rate of speed.	88.00	2.778	2.477	24.013	10*
47.	teach lesson by the project or job method.	88.00	2.546	2.270	26.283	10*

*Tied Ranks

Table 3 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
70.	develop constructive working relationships among students.	88.00	2.496	2.226	28.509	10*
4.	evaluate your personal and professional abilities and limitations.	86.67	2.297	2.018	30.527	13*
21.	formulate a system of grading consistent with school policy.	86.67	2.439	2.143	32.670	13*
43.	develop original instructional materials.	86.67	2.443	2.146	34.816	13*
39.	develop a course of study.	85.33	2.480	2.145	36.961	16*
45.	provide students with opportunities to become experienced in manipulative skills.	85.33	2.694	2.330	39.291	16*
51.	teach a demonstration lesson.	85.33	2.352	2.034	41.325	16*
61.	uphold acceptable standards of student behavior in vocational classrooms and laboratories.	85.33	2.695	2.331	43.656	16*
5.	acquire new occupational skills needed to keep pace with technological advancement in your teaching field.	84.00	2.425	2.064	45.720	20
34.	assist in writing general objectives for courses offered in the vocational education program.	83.67	2.310	1.967	47.687	21
48.	provide students with opportunities to apply new information while under supervision of instructor.	82.67	2.592	2.172	49.859	22

Table 3 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
14.	obtain informal feedback on the vocational program through contacts with individuals in the school and community.	80.00	2.010	1.630	51.489	23
53.	give an illustrated talk.	78.67	2.155	1.718	53.207	24*
79.	assist students in securing and in filling out applications for jobs, scholarships, education loans, or college admission.	78.67	2.032	1.620	54.827	24*
2.	promote the attainment of the goals and objectives of the teaching profession.	77.33	2.081	1.631	56.458	26*
33.	identify the competencies needed for entry into an occupation.	77.33	1.946	1.525	57.983	26*
1.	identify current trends of the teaching profession.	72.33	1.906	1.416	59.399	28
64.	arrange for the storage and security of vocational supplies and equipment.	70.67	2.077	1.487	60.886	29*
74.	assist students in determining ways to best describe their saleable skills.	70.67	2.265	1.623	62.509	29*
78.	present information to students on post-high school training and educational opportunities available to them.	70.67	2.038	1.460	63.969	29*
40.	determine group and individual learning experiences for the unit based on individual differences of students.	69.33	2.275	1.598	65.567	32

Table 3 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
7b.	establish communication patterns for exchanging information and for cooperating with the guidance counselor.	68.00	2.155	1.485	67.052	33
35.	write student performance goals for vocational education courses.	67.67	2.175	1.499	68.551	34*
62.	maintain an inventory of vocational tools, supplies, and equipment assigned to the laboratory.	66.67	2.057	1.390	69.941	34*
66.	schedule laboratory equipment for maximum utilization by students.	66.67	2.263	1.529	71.470	34*
69.	determine students' background and environment.	66.67	2.010	1.358	72.828	34*
20.	develop criterion test.	64.00	2.288	1.484	74.312	38*
63.	establish a system for repairing and servicing tools and equipment in a vocational laboratory.	64.00	2.148	1.393	75.705	38*
56.	prepare purchase request for approved vocational equipment and supplies.	61.33	1.787	1.111	76.816	40*
67.	direct students in a system for cleaning and maintaining the vocational laboratory.	61.33	1.950	1.212	78.028	40*
16.	consult advisory committee to obtain information concerning their expectations of the vocational program.	58.67	1.831	1.089	79.117	42

Table 3 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
24.	devise self-evaluation techniques for use by students.	57.33	2.037	1.184	80.301	43
23.	evaluate student-learner's work qualities, personal traits, and progress on the job.	56.00	2.410	1.368	81.669	44
46.	teach lesson using conference technique.	53.33	1.882	1.017	82.686	45
3.	participate in experimental and other data collecting research activities.	52.00	1.740	0.917	83.603	46
49.	obtain summary for a lesson.	50.67	1.930	0.991	84.594	47
65.	implement student "check-out" procedures for tools, supplies, and equipment used in the vocational laboratory.	50.67	1.914	0.983	85.577	48
31.	assist in the identification of the vocational education purposes and objectives for the school.	49.33	1.640	0.820	86.397	49
44.	conduct field trips.	48.00	1.562	0.760	87.157	50
68.	arrange layout of vocational laboratory to simulate or duplicate occupational environment.	46.67	1.808	0.855	88.012	51
38.	make a job analysis for determination of instructional content in the course taught.	43.67	1.937	0.864	88.876	52
55.	plan an operating budget proposal for consumable supplies, services, and materials needed in a vocational course.	42.67	1.739	0.752	89.628	53

Table 3 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
58.	supply administrators with data for vocational reports required by the state department of education.	41.33	1.756	0.736	90.364	54
57.	structure a filing system for records and report forms used in a vocational course.	38.67	1.669	0.654	91.018	55
18.	assist in planning the overall objectives of the total school program.	36.00	1.683	0.614	91.632	56
13.	analyze enrollment trends to determine student and parent acceptance of the vocational program.	34.67	1.484	0.521	92.153	57*
54.	prepare a capital outlay budget proposal for new equipment needed in a vocational course.	34.67	1.806	0.635	92.788	57*
73.	interpret occupational tests and inventories to students.	34.67	1.843	0.648	93.436	57*
7.	provide displays in the school and in the community on the vocational program.	33.33	1.443	0.488	93.924	60
28.	collect occupational data from employers to identify occupational standards.	32.00	1.405	0.456	94.380	61
9.	conduct an open house to familiarize members of the school and community with activities of the vocational program.	30.67	1.269	0.394	94.774	62*
17.	acquire information from members of the community power structure regarding their expectations of the vocational program.	30.67	1.521	0.473	95.247	62*

Table 3 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
36.	maintain continual follow-up information on placement, employment, and training status of each graduate of the vocational program.	30.67	1.517	0.471	95.718	62*
29.	identify the role and function of the advisory committee.	29.33	1.505	0.447	96.165	65
11.	maintain liaison with union officials and employers.	26.67	1.674	0.452	96.617	66
30.	plan the annual agenda to be considered by the advisory committee.	22.67	1.754	0.403	97.020	67*
32.	analyze occupations with assistance of employers and labor representatives.	22.67	1.384	0.318	97.338	67*
8.	direct student presentations describing activities of the vocational program.	21.33	1.465	0.317	97.655	69
12.	conduct opinion surveys in the school and community concerning the vocational program.	16.00	1.102	0.179	97.834	70
59.	provide approved safety apparel and devices for vocational students assigned to hazardous equipment.	12.00	1.847	0.225	98.059	71*
81.	provide prospective student-learners with resource materials on occupational opportunities to aid them in selecting a vocation.	12.00	1.673	0.203	98.262	71*

Table 3 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
27.	appoint and involve advisory committee in conducting an occupational survey.	10.67	1.422	0.154	98.416	73*
37.	disseminate a summary of the vocational education evaluation to administrators, advisory committee members, and the board of education.	10.67	1.486	0.161	98.577	73*
26.	identify the geographical area in which an occupational survey will be conducted.	8.00	1.497	0.121	98.698	75
6.	supervise student teachers.	6.67	1.821	0.123	98.821	76*
25.	organize a steering committee to assist in the preplanning activities of an occupational survey.	6.67	0.926	0.063	98.884	76*
60.	maintain a record of safety instruction presented in compliance with safety laws and regulations.	6.67	1.554	0.105	98.989	76*
80.	establish criteria for selection of student-learners.	6.67	1.656	0.112	99.101	76*
84.	select student-learner training stations.	6.67	1.885	0.127	99.228	76*
91.	supervise student-learner's on-the-job experience.	6.67	1.891	0.128	99.356	76*
94.	obtain from advisory committee information on ways to improve related instruction and on-the-job training.	6.67	1.731	0.117	99.473	76*
15.	obtain information from parents relative to their expectations of the vocational program.	5.33	1.174	0.063	99.536	83*

Table 3 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
83.	match a student-learner's unique characteristics with an appropriate training station.	5.33	1.608	0.087	99.623	83*
82.	identify a prospective student-learner on basis of selection criteria and data.	4.00	1.550	0.063	99.686	85*
86.	establish criteria to evaluate and approve training stations.	4.00	1.470	0.060	99.746	85*
85.	arrange with a union to make contract provision for student-learners.	2.67	1.396	0.038	99.784	87*
87.	assess training capability of the prospective training station.	2.67	1.673	0.045	99.829	87*
88.	assess education adequacy of a prospective training station's facilities and equipment.	2.67	1.673	0.045	99.874	87*
92.	develop a training plan for student-learner with employer.	2.67	1.956	0.053	99.927	87*
10.	sponsor student-parent activities for the vocational program.	1.33	1.675	0.023	99.950	91*
89.	assess safety provision of facilities and equipment of the prospective training stations.	1.33	1.031	0.014	99.964	91*
90.	develop systematic training plan and agreement.	1.33	1.289	0.017	99.981	91*
93.	sponsor employer/student-learner banquet for the vocational program.	1.33	1.259	0.017	99.998	91*

Table 4

Analysis of Tasks Performed by 168 Post-Secondary Vocational-Technical Teachers of Technical Occupations

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
42.	identify textbook, reference, and other instructional material.	97.62	2.185	2.146	2.146	1
72.	demonstrate a regard for and an interest in the students as individuals.	95.23	2.550	2.443	4.589	2
22.	appraise students' performance in relation to performance objectives.	94.64	2.339	2.227	6.816	3*
52.	give a lecture.	94.64	2.225	2.118	8.934	3*
5.	acquire new occupational skills needed to keep pace with technological advancement in your teaching field.	94.05	2.299	2.175	11.109	5
43.	develop original instructional materials.	93.45	2.391	2.248	13.357	6
41.	prepare a lesson plan.	92.86	2.251	2.103	15.460	7*
71.	encourage students to discuss career aspirations.	92.86	2.170	2.027	17.487	7*
39.	develop a course of study.	92.26	2.220	2.060	19.547	9*
77.	present information to students on employment opportunities.	92.26	2.168	2.012	21.559	9*
19.	establish criteria for evaluating student performance.	91.76	2.140	1.973	23.532	11*

*Tied Ranks

Table 4 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
21.	formulate a system of grading consistent with school policy.	91.76	2.044	1.885	25.417	11*
75.	work with other teachers and counselors to help students with individual problems.	91.06	1.961	1.797	27.214	13
53.	give an illustrated talk.	90.48	2.181	1.985	29.199	14*
61.	uphold acceptable standards of student behavior in vocational classrooms and laboratories.	90.48	2.116	1.926	31.125	14*
4.	evaluate your personal and professional abilities and limitations.	89.29	1.986	1.784	32.909	16*
45.	provide students with opportunities to become experienced in manipulative skills.	89.29	2.390	2.147	35.056	16*
47.	teach lesson by the project or job method.	89.29	2.298	2.064	37.120	16*
48.	provide students with opportunities to apply new information while under supervision of instructor.	88.10	2.340	2.074	39.194	19*
51.	teach a demonstration lesson.	88.10	2.130	1.888	41.074	19*
70.	develop constructive working relationships among students.	87.50	2.169	1.909	42.983	21
33.	identify the competencies needed for entry into an occupation.	83.33	1.977	1.657	44.640	22
14.	obtain informal feedback on the vocational program through contacts with individuals in the school and community.	82.14	1.794	1.483	46.123	23

Table 4 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
34.	assist in writing general objectives for courses offered in the vocational education program.	79.17	1.986	1.582	47.705	24
79.	assist students in securing and in filling out applications for jobs, scholarships, education loans, or college admission.	75.60	1.887	1.435	49.140	25
66.	schedule laboratory equipment for maximum utilization by students.	75.00	1.979	1.493	50.633	26
20.	develop criterion test.	74.40	1.957	1.465	52.098	27
50.	provide instruction so that students can progress at own rate of speed.	73.91	2.237	1.661	53.759	28
74.	assist students in determining ways to best describe their saleable skills.	73.81	1.858	1.380	55.139	29
23.	evaluate student-learner's work qualities, personal traits, and progress on the job.	73.21	1.452	0.844	55.983	30*
56.	prepare purchase request for approved vocational equipment and supplies.	73.21	1.730	1.274	57.257	30*
16.	consult advisory committee to obtain information concerning their expectations of the vocational program.	72.62	1.694	1.237	58.494	32*
69.	determine students' background and environment.	72.62	1.746	1.275	59.769	32*
64.	arrange for the storage and security of vocational supplies and equipment.	72.02	1.838	1.332	61.101	34*

Table 4 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
78.	present information to students on post-high school training and educational opportunities available to them.	72.02	1.881	1.363	62.464	34*
44.	conduct field trips.	70.83	1.620	1.154	63.618	36*
62.	maintain an inventory of vocational tools, supplies, and equipment assigned to the laboratory.	70.83	1.863	1.328	64.946	36*
2.	promote the attainment of the goals and objectives of the teaching profession.	69.64	1.667	1.168	66.114	38*
38.	make a job analysis for determination of instructional content in the course taught.	69.64	1.845	1.293	67.407	38*
67.	direct students in a system for cleaning and maintaining the vocational laboratory.	69.63	1.712	1.200	68.607	40
40.	determine group and individual learning experiences for the unit based on individual differences of students.	67.26	1.852	1.253	69.860	41
1.	identify current trends of the teaching profession.	65.48	1.629	1.073	70.933	42*
46.	teach lesson using conference technique.	65.48	1.850	1.218	72.137	42*
68.	arrange layout of vocational laboratory to simulate or duplicate occupational environment.	65.48	1.773	1.168	73.319	42*
55.	plan an operating budget proposal for consumable supplies, services, and materials needed in a vocational course.	64.88	1.764	1.151	74.470	45

Table 4 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
35.	write student performance goals for vocational education courses.	63.69	1.834	1.175	75.645	46*
76.	establish communication patterns for exchanging information and for cooperating with the guidance counselor.	63.69	1.696	1.087	76.732	46*
58.	supply administrators with data for vocational reports required by the state department of education.	62.50	1.562	0.982	77.714	48
63.	establish a system for repairing and servicing tools and equipment in a vocational laboratory.	61.90	1.785	1.112	78.826	49
54.	prepare a capital outlay budget proposal for new equipment needed in a vocational course.	60.75	1.582	0.966	79.792	50
3.	participate in experimental and other data collecting research activities.	58.33	2.114	1.557	81.349	51
24.	devise self-evaluation techniques for use by students.	57.74	1.694	0.984	82.333	52
65.	implement student "check-out" procedures for tools, supplies, and equipment used in the vocational laboratory.	56.55	1.712	0.974	83.307	53
49.	obtain summary for a lesson.	55.36	1.815	1.011	84.318	54
9.	conduct an open house to familiarize members of the school and community with activities of the vocational program.	54.76	1.264	0.697	85.017	55

Table 4 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
57.	structure a filing system for records and report forms used in a vocational course.	54.17	1.499	0.817	85.832	56
28.	collect occupational data from employers to identify occupational standards.	53.57	1.653	0.891	86.723	57
11.	maintain liaison with union officials and employers.	52.98	1.698	0.905	87.628	58*
31.	assist in the identification of the vocational education purposes and objectives for the school.	52.98	1.671	0.862	88.490	58*
73.	interpret occupational tests and inventories to students.	51.79	1.669	0.870	89.360	60
36.	maintain continual follow-up information on placement, employment, and training status of each graduate of the vocational program.	50.60	1.570	0.799	90.159	61
13.	analyze enrollment trends to determine student and parent acceptance of the vocational program.	49.40	1.512	0.752	90.911	62
7.	provide displays in the school and in the community on the vocational program.	47.62	1.254	0.601	91.512	63*
29.	identify the role and function of the advisory committee.	47.62	1.464	0.701	92.213	63*
30.	plan the annual agenda to be considered by the advisory committee.	42.26	1.508	0.641	92.854	65*

Table 4 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
32.	analyze occupations with assistance of employers and labor representatives.	42.26	1.464	0.623	93.477	65*
17.	acquire information from members of the community power structure regarding their expectations of the vocational program.	41.67	1.418	0.594	94.071	67*
59.	provide approved safety apparel and devices for vocational students assigned to hazardous equipment.	41.67	1.601	0.671	94.742	67*
18.	assist in planning the overall objectives of the total school program.	40.48	1.626	0.662	95.404	69
60.	maintain a record of safety instruction presented in compliance with safety laws and regulations.	36.90	1.588	0.590	95.994	70
8.	direct student presentations describing activities of the vocational program.	29.76	1.269	0.380	96.374	71
12.	conduct opinion surveys in the school and community concerning the vocational program.	24.40	1.217	0.299	96.673	72
27.	appoint and involve advisory committee in conducting an occupational survey.	20.24	1.593	0.324	96.997	73
37.	disseminate a summary of the vocational education evaluation to administrators, advisory committee members, and the board of education.	16.07	1.248	0.202	97.199	74

Table 4 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
15.	obtain information from parents relative to their expectations of the vocational program.	15.48	1.063	0.166	97.365	75
6.	supervise student teachers.	14.88	1.351	0.202	97.567	76
81.	provide prospective student-learners with resource materials on occupational opportunities to aid them in selecting a vocation.	13.69	1.267	0.175	97.742	77*
91.	supervise student-learner's on-the-job experience.	13.69	1.747	0.203	97.945	77*
80.	establish criteria for selection of student-learners.	13.10	1.337	0.176	98.121	79*
88.	assess educational adequacy of a prospective training station's facilities and equipment.	13.10	1.156	0.152	98.273	79*
26.	identify the geographical area in which an occupational survey will be conducted.	12.50	1.018	0.128	98.401	81*
84.	select student-learner training stations.	12.50	1.269	0.160	98.561	81*
87.	assess training capability of the prospective training station.	12.50	1.138	0.143	98.704	81*
90.	develop systematic training plan and agreement.	12.50	1.316	0.166	98.870	81*
82.	identify a prospective student-learner on basis of selection criteria and data.	11.90	1.254	0.150	99.020	85*

Table 4 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
83.	match a student-learner's unique characteristics with an appropriate training station.	11.90	1.258	0.151	99.171	85*
92.	develop a training plan for student-learner with employer.	11.90	1.317	0.158	99.329	85*
94.	obtain from advisory committee information on ways to improve related instruction and on-the-job training.	11.90	1.490	0.178	99.507	85*
89.	assess safety provision of facilities and equipment of the prospective training stations.	11.31	1.215	0.138	99.645	89
86.	establish criteria to evaluate and approve training stations.	10.71	1.248	0.135	99.780	90
25.	organize a steering committee to assist in the preplanning activities of an occupational survey.	7.74	1.243	0.097	99.877	91
10.	sponsor student-parent activities for the vocational program.	6.55	0.792	0.052	99.929	92
85.	arrange with a union to make contract provision for student-learners.	3.57	0.895	0.032	99.961	93*
93.	sponsor employer/student-learner banquet for the vocational program.	3.57	0.937	0.034	99.995	93*

Table 5

Analysis of Tasks Performed by Sixty-two Post-Secondary Vocational-Technical Teachers of Industrial Occupations

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
22.	appraise students' performance in relation to performance objectives.	98.39	2.077	2.077	2.077	1*
23.	evaluate student-learner's work qualities, personal traits, and progress on the job.	98.39	2.098	2.064	4.141	1*
51.	teach a demonstration lesson.	98.39	2.126	2.092	6.233	1*
42.	identify textbook, reference, and other instructional material.	98.39	1.815	1.786	8.091	1*
47.	teach lesson by the project or job method.	98.39	2.150	2.115	10.134	5*
52.	give a lecture.	98.39	1.891	1.860	11.994	5*
61.	uphold acceptable standards of student behavior in vocational classrooms and laboratories.	98.39	1.954	1.954	13.948	5*
19.	establish criteria for evaluating student performance.	96.77	1.808	1.750	15.698	8*
41.	prepare a lesson plan.	96.77	1.960	1.896	17.594	8*
53.	give an illustrated talk.	96.77	1.929	1.867	19.461	8*
70.	develop constructive working relationships among students.	96.77	1.948	1.885	21.346	8*

*Tied Ranks

Table 5 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
5.	acquire new occupational skills needed to keep pace with technological advancement in your teaching field.	95.16	1.983	1.887	23.233	12*
41.	develop original instructional materials.	95.16	1.950	1.855	25.088	12*
45.	provide students with opportunities to become experienced in manipulative skills.	95.16	2.252	2.143	27.231	12*
67.	direct students in a system for cleaning and maintaining the vocational laboratory.	95.16	1.785	1.699	28.930	12*
77.	present information to students on employment opportunities.	95.16	1.842	1.842	30.772	12*
39.	develop a course of study.	93.55	1.923	1.706	32.478	17*
66.	schedule laboratory equipment for maximum utilization by students.	93.55	1.912	1.789	34.267	17*
48.	provide students with opportunities to apply new information while under supervision of instructor.	91.94	2.075	1.908	36.175	19*
50.	provide instruction so that students can progress at own rate of speed.	91.94	2.023	1.860	38.035	19*
68.	arrange layout of vocational laboratory to simulate or duplicate occupational environment.	91.94	1.753	1.612	39.647	19*
71.	encourage students to discuss career aspirations.	91.94	1.751	1.609	41.256	19*

Table 5 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
75.	work with other teachers and counselors to help students with individual problems.	91.94	1.646	1.513	42.769	19*
21.	formulate a system of grading consistent with school policy.	90.32	1.716	1.550	44.319	24*
33.	identify the competencies needed for entry into an occupation.	90.32	1.909	1.724	46.043	24*
64.	arrange for the storage and security of vocational supplies and equipment.	90.31	1.781	1.609	47.652	26
14.	obtain informal feedback on the vocational program through contacts with individuals in the school and community.	88.71	1.684	1.494	49.146	27
4.	evaluate your personal and professional abilities and limitations.	87.10	1.687	1.470	50.616	28*
62.	maintain an inventory of vocational tools, supplies, and equipment assigned to the laboratory.	87.10	1.731	1.508	52.124	28*
20.	develop criterion test.	85.48	1.734	1.482	53.606	30*
65.	implement student "check-out" procedures for tools, supplies, and equipment used in the vocational laboratory.	85.48	1.695	1.449	55.055	30*
40.	determine group and individual learning experiences for the unit based on individual differences of students.	83.87	1.823	1.529	56.584	32*
44.	conduct field trips.	83.87	1.292	1.084	57.668	32*

Table 5 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
63.	establish a system for repairing and servicing tools and equipment in a vocational laboratory.	83.87	1.653	1.386	59.054	32*
59.	provide approved safety apparel and devices for vocational students assigned to hazardous equipment.	82.26	1.664	1.369	60.423	35
38.	make a job analysis for determination of instructional content in the course taught.	80.65	1.641	1.323	61.746	36*
56.	prepare purchase request for approved vocational equipment and supplies.	80.65	1.619	1.306	63.052	36*
74.	assist students in determining ways to best describe their saleable skills.	80.65	1.661	1.340	64.392	36*
72.	demonstrate a regard for and an interest in the students as individuals.	79.03	2.203	2.203	66.595	39
16.	consult advisory committee to obtain information concerning their expectations of the vocational program.	77.42	1.514	1.147	67.742	40*
60.	maintain a record of safety instruction presented in compliance with safety laws and regulations.	77.42	1.579	1.223	68.965	40*
76.	establish communication patterns for exchanging information and for cooperating with the guidance counselor.	75.81	1.594	1.209	70.174	42*
79.	assist students in securing and in filling out applications for jobs, scholarships, education loans, or college admission.	75.81	1.591	1.206	71.380	42*

Table 5 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
54.	prepare a capital outlay budget proposal for new equipment needed in a vocational course.	74.19	1.544	1.145	72.525	44*
55.	plan an operating budget proposal for consumable supplies, services, and materials needed in a vocational course.	74.19	1.596	1.184	73.709	44*
34.	assist in writing general objectives for courses offered in the vocational education program.	72.58	1.692	1.228	74.937	46*
78.	present information to students on post-high school training and educational opportunities available to them.	72.58	1.447	1.051	75.988	46*
57.	structure a filing system for records and report forms used in a vocational course.	70.97	1.349	0.936	76.924	48*
69.	determine students' background and environment.	70.97	1.431	1.015	77.939	48*
28.	collect occupational data from employers to identify occupational standards.	70.97	1.382	0.981	78.920	48*
24.	devise self-evaluation techniques for use by student.	66.13	1.712	1.132	80.052	51*
46.	teach lesson using conference technique.	66.13	1.596	1.055	81.107	51*
35.	write student performance goals for vocational education courses.	64.52	1.628	1.050	82.157	53*

Table 5 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
58.	supply administrators with data for vocational reports required by the state department of education.	64.52	1.391	0.875	83.032	53*
49.	obtain summary for a lesson.	62.90	1.660	1.044	84.076	54
1.	identify current trends of the teaching profession.	61.29	1.339	0.821	84.897	56*
2.	promote the attainment of the goals and objectives of the teaching profession.	61.29	1.539	0.943	86.661	56*
73.	interpret occupational tests and inventories to students.	61.29	1.623	0.994	87.655	56*
11.	maintain liaison with union officials and employers.	59.68	1.625	0.969	88.624	59
36.	maintain continual follow-up information on placement, employment, and training status of each graduate of the vocational program.	56.45	1.397	0.789	89.413	60
29.	identify the role and function of the advisory committee.	54.84	1.452	0.773	90.186	61
31.	assist in the identification of the vocational education purposes and objectives for the school.	53.23	1.403	0.747	90.933	62
9.	conduct an open house to familiarize members of the school and community with activities of the vocational program.	51.61	1.207	0.623	91.556	63*

Table 5 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
18.	assist in planning the overall objectives of the total school program.	51.61	1.333	0.688	92.244	63*
17.	acquire information from members of the community power structure regarding their expectations of the vocational program.	50.00	1.342	0.671	92.915	65
3.	participate in experimental and other data collecting research activities.	46.77	1.413	0.661	93.576	66
30.	plan the annual agenda to be considered by the advisory committee.	45.16	1.356	0.590	94.166	67*
32.	analyze occupations with assistance of employers and labor representatives.	45.16	1.360	0.614	94.780	67*
7.	provide displays in the school and in the community on the vocational program.	43.55	1.112	0.484	95.264	69
13.	analyze enrollment trends to determine student and parent acceptance of the vocational program.	37.10	1.203	0.446	95.710	70
8.	direct student presentations describing activities of the vocational program.	33.87	1.204	0.408	96.118	71*
12.	conduct opinion surveys in the school and community concerning the vocational program.	33.87	1.161	0.393	96.511	71*
15.	obtain information from parents relative to their expectations of the vocational program.	24.19	1.004	0.243	96.754	73*

Table 5 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
89.	assess safety provision of facilities and equipment of the prospective training stations.	24.19	1.463	0.354	97.108	73*
37.	disseminate a summary of the vocational education evaluation to administrators, advisory committee members, and the board of education.	22.58	1.046	0.236	97.344	75*
91.	supervise student-learner's on-the-job experience.	22.58	1.483	0.335	97.679	75*
90.	develop systematic training plan and agreement.	20.97	1.418	0.297	97.976	77*
94.	obtain from advisory committee information on ways to improve related instruction and on-the-job training.	20.97	1.296	0.272	98.248	77*
87.	assess training capability of the prospective training station.	19.35	1.394	0.270	98.518	79
80.	establish criteria for selection of student-learners.	17.74	1.282	0.227	98.745	80*
83.	match a student-learner's unique characteristics with an appropriate training station.	17.74	1.255	0.223	98.968	80*
84.	select student-learner training stations.	17.74	1.409	0.250	99.218	80*
86.	establish criteria to evaluate and approve training stations.	17.74	1.447	0.257	99.475	80*

Table 5 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
86.	assess educational adequacy of a prospective training station's facilities and equipment.	17.74	1.409	0.250	99.725	80*
81.	provide prospective student-learners with resource materials on occupational opportunities to aid them in selecting a vocation.	16.13	1.182	0.191	99.916	85*
92.	develop a training plan for student-learner with employer.	16.13	1.414	0.228	100.144	85*
27.	appoint and involve advisory committee in conducting an occupational survey.	14.52	1.088	0.140	100.284	87
6.	supervise student teachers.	11.29	1.291	0.125	100.409	88*
10.	sponsor student-parent activities for the vocational program.	11.29	0.930	0.105	100.514	88*
25.	organize a steering committee to assist in the preplanning activities of an occupational survey.	9.68	0.889	0.086	100.600	90
82.	identify a prospective student-learner on basis of selection criteria and data.	8.06	1.218	0.098	100.698	91
26.	identify the geographical area in which an occupational survey will be conducted.	6.45	1.079	0.052	100.750	92
85.	arrange with a union to make contract provision for student-learners.	4.84	0.838	0.041	100.791	93*
93.	sponsor employer/student-learner banquet for the vocational program.	4.84	0.638	0.031	100.822	93*

Table 6

Analysis of Tasks Performed by Eighty Post-Secondary Vocational-Technical Teachers of Health Occupations

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
72.	demonstrate a regard for and an interest in the students as individuals.	96.25	2.871	2.764	2.764	1
22.	appraise students' performance in relation to performance objectives.	95.00	2.668	2.534	5.198	2*
19.	establish criteria for evaluating student performance.	95.00	2.349	2.231	7.529	2*
5.	acquire new occupational skills needed to keep pace with technological advancement in your teaching field.	93.75	2.275	2.133	0.662	4*
42.	identify textbook, reference, and other instructional material.	93.75	2.274	2.132	11.794	4*
75.	work with other teachers and counselors to help students with individual problems.	93.75	2.475	2.320	14.114	4*
71.	encourage students to discuss career aspirations.	92.50	2.238	2.070	16.184	7
23.	evaluate student-learner's work qualities, personal traits, and progress on the job.	90.00	2.653	2.388	18.572	8*
41.	prepare a lesson plan.	90.00	2.356	2.121	20.693	8*
70.	develop constructive working relationships among students.	90.00	2.433	2.190	22.883	8*

*Tied Ranks

Table 6 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
77.	present information to students on employment opportunities.	90.00	2.090	1.881	24.764	8*
4.	evaluate your personal and professional abilities and limitations.	88.75	2.179	1.934	26.698	12*
45.	provide students with opportunities to become experienced in manipulative skills.	88.75	2.680	2.379	29.077	12*
48.	provide students with opportunities to apply new information while under supervision of instructor.	88.75	2.685	2,383	31.460	12*
52.	give a lecture.	88.75	2.208	1.960	33.420	12*
21.	formulate a system of grading consistent with school policy.	87.50	2.053	1.796	35.216	16*
43.	develop original instructional materials.	87.50	2.205	1.929	37.145	16*
39.	develop a course of study.	86.25	1.396	1.066	39.211	18*
46.	teach lesson using conference technique.	86.25	2.265	1.953	41.164	18*
51.	teach a demonstration lesson.	82.50	2.369	1.954	43.118	20*
53.	give an illustrated talk.	82.50	2.197	1.813	44.931	20*
61.	uphold acceptable standards of student behavior in vocational classrooms and laboratories.	82.50	2.083	1.718	46.649	20*
34.	assist in writing general objectives for courses offered in the vocational education program.	81.25	2.057	1.671	48.320	23

Table 6 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
14.	obtain informal feedback on the vocational program through contacts with individuals in the school and community.	80.00	1.801	1.441	49.761	24*
79.	assist students in securing and in filling out applications for jobs, scholarships, education loans, or college admission.	80.00	1.778	1.422	51.183	24*
20.	develop criterion test.	78.75	2.306	1.816	52.999	26
40.	determine group and individual learning experiences for the unit based on individual differences of students.	77.50	2.395	1.856	54.855	27
35.	write student performance goals for vocational education courses.	76.25	2.020	1.540	56.395	28
47.	teach lesson by the project or job method.	75.02	2.219	1.664	58.059	29
69.	determine students' background and environment.	72.50	2.003	1.453	59.512	30
2.	promote the attainment of the goals and objectives of the teaching profession.	71.25	1.949	1.389	60.901	31
24.	devise self-evaluation techniques for use by students.	70.00	1.953	1.367	62.268	32
49.	obtain summary for a lesson.	67.50	1.970	1.330	63.598	33*
76.	establish communication patterns for exchanging information and for cooperating with the guidance counselor.	67.50	2.009	1.356	64.954	33*

Table 6 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
18.	assist in planning the overall objectives of the total school program.	66.25	1.877	1.243	66.197	35
50.	provide instruction so that students can progress at own rate of speed.	63.75	2.471	1.575	67.772	36*
78.	present information to students on post-high school training and educational opportunities available to them.	63.75	1.873	1.194	68.966	36*
1.	identify current trends of the teaching profession.	62.50	1.689	1.056	70.022	38*
33.	identify the competencies needed for entry into an occupation.	62.50	1.686	1.053	71.075	38*
64.	arrange for the storage and security of vocational supplies and equipment.	62.50	1.572	0.982	72.057	38*
66.	schedule laboratory equipment for maximum utilization by students.	60.00	1.738	1.043	73.100	41
74.	assist students in determining ways to best describe their saleable skills.	58.75	2.057	1.209	74.209	42
16.	consult advisory committee to obtain information concerning their expectations of the vocational program.	56.25	1.463	0.823	75.132	43*
62.	maintain an inventory of vocational tools, supplies, and equipment assigned to the laboratory.	56.25	1.634	0.919	76.051	43*
73.	interpret occupational tests and inventories to students.	56.25	1.735	0.976	77.027	43*

Table 6 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
67.	direct students in a system for cleaning and maintaining the vocational laboratory.	56.25	1.477	0.831	77.858	47*
57.	structure a filing system for records and report forms used in a vocational course.	55.00	1.444	0.794	78.652	47
7.	provide displays in the school and in the community on the vocational program.	53.75	1.152	0.619	79.271	48*
58.	supply administrators with data for vocational reports required by the state department of education.	53.75	1.480	0.796	80.067	48*
68.	arrange layout of vocational laboratory to simulate or duplicate occupational environment.	53.75	1.701	0.914	80.981	48*
31.	assist in the identification of the vocational education purposes and objectives for the school.	52.50	1.465	0.769	81.750	51*
44.	conduct field trips.	52.50	1.320	0.693	82.443	51*
17.	acquire information from members of the community power structure regarding their expectations of the vocational program.	47.50	1.531	0.727	83.170	53*
38.	make a job analysis for determination of instructional content in the course taught.	47.50	1.733	0.823	83.993	53*
55.	plan an operating budget proposal for consumable supplies, services, and materials needed in a vocational course.	46.25	1.587	0.734	84.727	55*

Table 6 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
56.	prepare purchase request for approved vocational equipment and supplies.	46.25	1.531	0.708	85.435	55*
65.	implement student "check-out" procedures for tools, supplies, and equipment used in the vocational laboratory.	46.25	1.542	0.713	86.148	55*
3.	participate in experimental and other data collecting research activities.	45.00	1.125	0.506	86.654	58
91.	supervise student-learner's on-the-job experience.	42.50	2.194	0.932	87.586	59
9.	conduct an open house to familiarize members of the school and community with activities of the vocational program.	41.25	0.996	0.411	87.997	60
8.	direct student presentations describing activities of the vocational program.	38.75	0.956	0.370	88.367	61*
60.	maintain a record of safety instruction presented in compliance with safety laws and regulations.	38.75	1.763	0.683	89.050	61*
29.	identify the role and function of the advisory committee.	37.50	1.266	0.475	89.525	63*
63.	establish a system for repairing and servicing tools and equipment in a vocational laboratory.	37.50	1.670	0.626	90.151	63*
54.	prepare a capital outlay budget proposal for new equipment needed in a vocational course.	36.25	1.602	0.581	90.732	65

Table 6 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
36.	maintain continual follow-up information on placement, employment, and training status of each graduate of the vocational program.	35.00	1.363	0.477	91.209	66
30.	plan the annual agenda to be considered by the advisory committee.	32.50	1.330	0.432	91.641	67*
59.	provide approved safety apparel and devices for vocational students assigned to hazardous equipment.	32.50	1.516	0.493	92.134	67*
90.	develop systematic training plan and agreement.	32.50	1.736	0.564	92.698	67*
84.	select student-learner training stations.	31.25	1.934	0.604	93.302	70*
88.	assess educational adequacy of a prospective training station's facilities and equipment.	31.25	1.872	0.585	93.887	70*
87.	assess training capability of the prospective training station.	30.00	1.819	0.546	94.443	72*
92.	develop a training plan for student-learner with employer.	30.00	1.698	0.509	94.942	72*
89.	assess safety provision of facilities and equipment of the prospective training stations.	27.50	1.784	0.491	95.433	74*
86.	establish criteria to evaluate and approve training stations.	27.50	1.837	0.505	95.938	74*

Table 6 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
28.	collect occupational data from employers to identify occupational standards.	26.25	1.199	0.315	96.253	76
11.	maintain liaison with union officials and employers.	25.00	1.517	0.379	96.632	77*
32.	analyze occupations with assistance of employers and labor representatives.	25.00	1.399	0.350	96.982	77*
80.	establish criteria for selection of student-learners.	25.00	1.567	0.392	97.374	77*
94.	obtain from advisory committee information on ways to improve related instruction and on-the-job training.	25.00	1.329	0.332	97.706	77*
13.	analyze enrollment trends to determine student and parent acceptance of the vocational program.	20.00	1.220	0.244	97.950	81
12.	conduct opinion surveys in the school and community concerning the vocational program.	18.75	1.155	0.216	98.166	82*
81.	provide prospective student-learners with resource materials on occupational opportunities to aid them in selecting a vocation.	18.75	1.510	0.283	98.449	82*
82.	identify a prospective student-learner on basis of selection criteria and data.	18.75	1.701	0.319	98.768	82*

Table 6 (continued)

Task Number	Task Statement	Percent of respondents performing	Average percent time spent by respondents performing	Average percent time spent by all respondents	Cumulative sum of average percent time spent by all respondents	Rank by percent of respondents performing
37.	disseminate a summary of the vocational education evaluation to administrators, advisory committee members, and the board of education.	17.50	1.202	0.210	98.978	85
83.	match a student-learner's unique characteristics with an appropriate training station.	16.25	1.609	0.262	99.240	86
10.	sponsor student-parent activities for the vocational program.	15.00	0.891	0.134	99.374	87*
15.	obtain information from parents relative to their expectations of the vocational program.	15.00	1.184	0.178	99.552	87*
6.	supervise student teachers.	8.75	2.204	0.165	99.717	89*
25.	organize a steering committee to assist in the preplanning activities of an occupational survey.	8.75	1.074	0.094	99.811	89*
27.	appoint and involve advisory committee in conducting an occupational survey.	7.50	1.332	0.100	99.911	91
26.	identify the geographical area in which an occupational survey will be conducted.	5.00	1.093	0.055	99.966	92
93.	sponsor employer/student-learner banquet for the vocational program.	2.50	1.250	0.031	99.997	93
85.	arrange with a union to make contract provision for student-learners.	0.0	0.0	0.0	99.997	94

Table 7

Rank by Population's Rating of Perceived Importance of Tasks (R-1) and Rank by Percentage of Respondents Performing Tasks (R-2) of Tasks Performed by 461 Post-Secondary Vocational-Technical Teachers (Ranks from 1-94)

Task Number	Task Statement	Across All Programs		Distribution and Marketing		Office Occupations		Technical Occupations		Industrial Occupations		Health Occupations	
		R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2
72.	demonstrate a regard for and an interest in the students as individuals.	1	1	2	1*	1	1	1	2	4	39	5	1
51.	teach a demonstration lesson.	2	19*	90	48*	3	16*	11	19*	1	1*	1	20*
45.	provide students with opportunities to become experienced in manipulative skills.	3	21	89	74*	4*	16*	7	16*	2	12*	3	12*
22.	appraise students' performance in relation to performance objectives.	4*	3	35*	8*	6	3	6	3*	16	1*	4	2*
48.	provide students with opportunities to apply new information while under supervision of instructor.	4*	17	14*	25*	14*	22	8*	19*	8*	19*	2	12*
61.	uphold acceptable standards of student behavior in vocational classrooms and laboratories.	6	15	8*	19*	14*	16*	2	14*	6	5*	13*	20*
70.	develop constructive working relationships among students.	7	13	4	8*	16*	10*	8*	21	10	8*	7	8*
42.	identify textbook, reference, and other instructional material.	8	2	5	1*	8*	4*	5	1	7	1*	18*	4*
53.	give an illustrated talk.	9	18	30*	25*	28*	24*	4	14*	14*	8*	14*	20*
19.	establish criteria for evaluating student performance.	10	4*	8*	1*	4*	6*	13*	11*	21	8*	8	2*

*Tied Ranks

Table 7 (continued)

Task Number	Task Statement	Across All Programs		Distribution and Marketing		Office Occupations		Technical Occupations		Industrial Occupations		Health Occupations	
		R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2
38.	make a job analysis for determination of instructional content in the course taught.	11	46	14*	74*	10	52	16	38*	11*	36*	26*	53*
39.	develop a course of study.	12*	14	8*	14*	11	16*	17	9*	37*	17*	10*	18*
77.	present information to students on employment opportunities.	12*	7*	6*	14*	18*	8*	15	9*	17*	12*	26*	8*
4.	evaluate your personal and professional abilities and limitations.	14	16	43*	1*	21*	13*	19*	16*	22*	28*	16*	12*
66.	schedule laboratory equipment for maximum utilization by students.	15	35	67*	89*	26	34*	12	26	11*	17*	36	41
23.	evaluate student-learner's work qualities, personal traits, and progress on the job.	16	24*	1	8*	16*	44	34*	30*	17*	1*	6	8*
52.	give a lecture.	17	4*	73*	1*	51	8*	8*	3*	56*	5*	12	12*
5.	acquire new occupational skills needed to keep pace with technological advancement in your teaching field.	18*	10*	8*	25*	7	20	3	5	3	12*	10*	4*
41.	prepare a lesson plan.	18*	6	75	41*	21*	2	18	7*	46*	8*	13*	8*
47.	teach lesson by the project or job method.	20*	19*	62*	33*	20	10*	22	16*	8*	5*	26*	29
71.	encourage students to discuss career aspirations.	20*	7*	14*	8*	24	6*	19*	7*	41	19*	24	7

Table 7 (continued)

Task Number	Task Statement	Across All Programs		Distribution and Marketing		Office Occupations		Technical Occupations		Industrial Occupations		Health Occupations	
		R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2
78.	present information to students on post-high school training and educational opportunities available to them.	22	32	3	25*	8*	29*	26*	34*	22*	46*	46*	36*
2.	promote the attainment of the goals and objectives of the teaching profession.	23*	34	35*	44*	12*	26*	30	38*	34*	56*	23	31
21.	formulate a system of grading consistent with school policy.	23*	12	14*	8*	12*	13*	34*	11*	48	24*	13*	16*
33.	identify the competencies needed for entry into an occupation.	23*	24*	30*	33*	39	26*	21	22	27*	24*	30	38*
59.	provide approved safety apparel and devices for vocational students assigned to hazardous equipment.	23*	69	85	94*	60	71*	13*	67*	5	35	52*	67*
75.	work with other teachers and counselors to help students with individual problems.	23*	9	14*	1*	34*	4*	23*	13	34*	19*	20*	4*
46.	teach lesson using conference technique.	28	36	35*	14*	65*	45	79*	42*	88*	51*	32*	18*
34.	assist in writing general objectives for courses offered in the vocational education program.	29*	23	25*	19*	27	21	26*	24	42*	46*	26*	23
43.	develop original instructional materials.	29*	11	53*	8*	30	13*	26*	6	32	12*	35	16*
62.	maintain an inventory of vocational tools, supplies, and equipment assigned to the laboratory.	29*	40	76	76*	28*	34*	23*	36*	14*	28*	49*	43*
50.	provide instruction so that students can progress at own rate of speed.	32	27	43*	48*	2	10*	32*	28	31	19*	55*	36*

Table 7 (continued)

Task Number	Task Statement	Across All Programs		Distribution and Marketing		Office Occupations		Technical Occupations		Industrial Occupations		Health Occupations	
		R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2
1.	identify current trends of the teaching profession.	33	41	47*	25*	21	28*	32*	42*	46*	56*	31	38*
74.	assist students in determining ways to best describe their saleable skills.	34	31	14*	33*	31	29*	26*	29	42*	36*	49*	42
49.	obtain summary for a lesson.	35	49*	53*	55*	37*	47	42	54	45	54	20*	33*
67.	direct students in a system for cleaning and maintaining the vocational laboratory.	36	43	50*	89*	52*	40*	25	40	20	12*	55*	43*
20.	develop criterion test.	37*	28	57*	40*	37*	38*	37*	27	51*	30*	26*	26
40.	determine group and individual learning experiences for the unit based on individual differences of students.	37*	29	53*	33*	18*	32	48*	41	39*	32*	25	27
68.	arrange layout of vocational laboratory to simulate or duplicate occupational environment.	37*	47	62*	87*	40	51	37*	42*	27*	19*	40*	48*
79.	assist students in securing and in filling out applications for jobs, scholarships, education loans, or college admission.	40	26	38*	19*	25	24*	34*	25	34*	42*	64*	24*
31.	assist in the identification of the vocational education purposes and objectives for the school.	41*	55*	20*	48*	42	49	31	58*	49*	62	58*	51*
56.	prepare purchase request for approved vocational equipment and supplies.	41*	42	73*	55*	43*	40*	37*	30*	24*	36*	63	55*
64.	arrange for the storage and security of vocational supplies and equipment.	41*	33	67*	79	41	29*	37*	34*	27*	26	60	38*

Table 7 (continued)

Task Number	Task Statement	Across All Programs		Distribution and Marketing		Office Occupations		Technical Occupations		Industrial Occupations		Health Occupations	
		R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2
89.	assess safety provision of facilities and equipment of the prospective training stations.	44	84	25*	76*	72	91*	44	89	19	73*	43	74*
35.	write student performance goals for vocational education courses.	45	39	71*	25*	32*	34	45*	46*	53*	53*	40*	28
55.	plan an operating budget proposal for consumable supplies, services, and materials needed in a vocational course.	46*	48	71*	33*	47	53	43	45	27*	44*	67	55*
65.	implement student "check-out" procedures for tools, supplies, and equipment used in the vocational laboratory.	46*	52*	83	89*	32*	48	45*	53	24*	30*	58*	55*
94.	obtain from advisory committee information on ways to improve related instruction and on-the-job training.	48	82	6*	63*	68*	76*	45*	85*	33	77*	54	77*
88.	assess educational adequacy of a prospective training station's facilities and equipment.	49	81	8*	63*	52*	82*	53*	79*	44	80*	32*	70*
54.	prepare a capital outlay budget proposal for new equipment needed in a vocational course.	50	54	77	60*	55*	57*	41	50	24*	44*	79*	65
44.	conduct field trips.	51	44	28*	68*	57*	50	52	36*	56*	32*	38	51*
87.	assess training capability of the prospective training station.	52	74*	8*	25*	43*	87*	39	81*	60*	79	37	72*
90.	develop systematic training plan and agreement.	53*	74*	43*	40*	45	91*	53*	81*	53*	77*	52*	67*

Table 7 (continued)

Task Number	Task Statement	Across All Programs		Distribution and Marketing		Office Occupations		Technical Occupations		Industrial Occupations		Health Occupations	
		R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2
91.	supervise student-learner's on-the-job experience.	53*	73	20*	48*	57*	76*	68*	77*	56*	75*	18*	59
76.	establish communication patterns for exchanging information and for cooperating with the guidance counselor.	55	37*	62*	19*	34*	33	63*	46*	64	42*	39	33*
9.	conduct an open house to familiarize members of the school and community with activities of the vocational program.	56*	60	62*	70*	65*	62*	48*	55	62	63*	66	60
81.	provide prospective student-learners with resource materials on occupational opportunities to aid them in selecting a vocation.	56*	80	30*	44*	48*	71*	58	77*	49*	85*	61	82*
80.	establish criteria for selection of student-learners.	58*	79	35*	44*	48*	76*	60*	79*	74*	80*	40*	77*
92.	develop a training plan for student-learner with employer.	58*	77*	53*	25*	68*	82*	66*	85*	35*	85*	44*	72*
24.	devise self-evaluation techniques for use by students.	60*	45	25*	48*	36	43	68*	52	67*	51*	46*	32
28.	collect occupational data from employers to identify occupational standards.	60*	59	28*	63*	65*	61	50*	57	59	48*	72	76
14.	obtain informal feedback on the vocational program through contacts with individuals in the school and community.	62*	22	50*	1*	61	23	56*	23	51*	27	74*	24*
84.	select student-learner training stations.	62*	76	20*	55*	48*	76*	71*	81*	79	80*	34	70*

Table 7 (continued)

Task Number	Task Statement	Across All Programs		Distribution and Marketing		Office Occupations		Technical Occupations		Industrial Occupations		Health Occupations	
		R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2
86.	establish criteria to evaluate and approve training stations.	62*	83	20*	48*	52*	85*	73	90	65*	80*	44*	74*
83.	match a student-learner's unique characteristics with an appropriate training station.	65	87	20*	60*	45*	83*	63*	85*	67*	80*	69	86
58.	supply administrators with data for vocational reports required by the state department of education.	66	49*	35*	33*	62	54	63*	48	69	53*	57	48*
7.	provide displays in the school and in the community on the vocational program.	67*	61	35*	63*	63*	60	60*	63*	65*	69	71	48*
16.	consult advisory committee to obtain information concerning their expectations of the vocational program.	67*	37*	30*	19*	77	42	55	32*	53*	40*	83	43*
63.	establish a system for repairing and servicing tools and equipment in a vocational laboratory.	67*	51	93*	89*	59	38*	50*	49	37*	32*	86	63*
82.	identify a prospective student-learner on basis of selection criteria and data.	70	88	47*	60*	63*	85*	71*	85*	63	91	62	82*
36.	maintain continual follow-up information on placement, employment, and training status of each graduate of the vocational program.	71*	63*	59*	70*	70	62*	66*	61	60*	60	70	66
73.	interpret occupational tests and inventories to students.	71*	57	57*	70*	73*	57*	60*	60	72	56*	68	43*
32.	analyze occupations with assistance of employers and labor representatives.	73	70	35*	70*	80	67*	56*	65*	71	67*	81*	77*

Table 7 (continued)

Task Number	Task Statement	Across All Programs		Distribution and Marketing		Office Occupations		Technical Occupations		Industrial Occupations		Health Occupations	
		R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2
29.	identify the role and function of the advisory committee.	74*	63*	47*	40*	81	65	68*	63*	70	61	74*	63*
37.	disseminate a summary of the vocational education evaluation to administrators, advisory committee members, and the board of education.	74*	77*	78	68*	73*	73*	74	74	73	75*	64*	85
60.	maintain a record of safety instruction presented in compliance with safety laws and regulations.	76	67	92	89*	84	76*	89	70	11*	40*	48	61*
3.	participate in experimental and other data collecting research activities.	77	55*	87*	55*	75	46	77*	51	74*	66	74*	58
6.	supervise student teachers.	78*	89	84	84*	76	76*	81	76	80*	88*	77*	89*
18.	assist in planning the overall objectives of the total school program.	78*	58	79	55*	78	56	82	69	82	63*	73	35
11.	maintain liaison with union officials and employers.	80*	62	34	19*	92	66	75	58*	78	59	84	77*
69.	determine students' background and environment.	80*	30	80*	14*	71	34*	85*	32*	92	48*	51	3[illegible]
30.	plan the annual agenda to be considered by the advisory committee.	82	68	43*	44*	90	67*	76	65*	84	67*	79*	67*
8.	direct student presentations describing activities of the vocational program.	83*	71	50*	76*	79	69	84	71	83	71*	81*	61*
27.	appoint and involve advisory committee in conducting an occupational survey.	83*	85*	67*	80*	83	73*	77*	73	88*	87	9	91

Table 7 (continued)

Task Number	Task Statement	Across All Programs		Distribution and Marketing		Office Occupations		Technical Occupations		Industrial Occupations		Health Occupations	
		R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2	R-1	R-2
26.	identify the geographical area in which an occupational survey will be conducted.	85	90	59*	80*	85*	75	79*	81*	85*	92	87	92
13.	analyze enrollment trends to determine student and parent acceptance of the vocational program.	86	66	62*	40*	82	57*	85*	62	77	70	89*	81
25.	organize a steering committee to assist in the preplanning activities of an occupational survey.	87	92	67*	82*	85*	76*	87	91	90	90	88	89*
17.	acquire information from members of the community power structure regarding their expectations of the vocational program.	88	65	82	33*	89	62*	88	67*	80*	65	91	53*
12.	conduct opinion surveys in the school and community concerning the vocational program.	89	72	87*	63*	87	70	90	72	85*	71*	89*	82*
85.	arrange with a union to make contract provision for student-learners.	90	93*	80*	84*	88	87*	93	93*	93	93*	85	94
15.	obtain information from parents relative to their expectations of the vocational program.	91	85*	92*	82*	94	83*	91	75	85*	73*	92	87*
57.	structure a filing system for records and report forms used in a vocational course.	92	52*	59*	48*	55*	55	83	56	76	48*	77*	47
10.	sponsor student-parent activities for the vocational program.	93	91	91	84*	93	91*	92	92	91	88*	94	87*
93.	sponsor employer/student-learner banquet for the vocational program.	94	93*	86*	87*	91	91*	94	93*	94	93*	93	93

APPENDIX II

JOB INVENTORY

GENERAL INSTRUCTIONS

1. Your assistance in completing this survey is very important. Your answers and the answers of other teachers completing this Job Inventory may be used to:

   a. Write specialty descriptions for your teaching field.

   b. Develop specialty training standards and college courses for your teaching field.

   c. Development of in-service activities for upgrading in your teaching field.

2. To qualify for this survey, you must meet these three conditions. YOU MUST:

   a. Be a full-time teacher in a public community college.

   b. Teach approved (by TEA) vocational-technical courses.

   c. Have taught a vocational-technical course in a public community college for at least two years.

3. This Job Inventory is in two sections:

   a. A Background Information section, where you give information about yourself, and

   b. a Task List section, where you give information about your current teaching assignment.

4. In providing the information requested, it is important to follow the procedures given.

INSTRUCTIONS FOR BACKGROUND INFORMATION SECTION

Complete each item in the Background Information section.

BACKGROUND DATA: POST-SECONDARY

OFFICE USE ONLY

☐☐☐☐ ☐ (1-5)

☐☐☐☐☐☐ (6-11)

(Please Print)

NAME_____

SCHOOL_____CAMPUS_____
(If Applicable)

COUNTY_____

Sex: M ☐ 1 F ☐ 2 (12)

MAJOR PROGRAM TEACHING ASSIGNMENT (CHECK ONE) (13)

1. ☐ Mid-Management and Distributive Occupations
2. ☐ Office Education
3. ☐ Technical Education
4. ☐ Industrial Education
5. ☐ Health Occupations
6. ☐ Other _____

What is the highest degree that you have received? (14)

1. ☐ Doctorate
2. ☐ Masters
3. ☐ Baccalaureate
4. ☐ Associate
5. ☐ High School Diploma
6. ☐ Other _____

Was your major or minor on any degree in education? (15)

☐ Yes 1 ☐ No 2

EXPERIENCE:

Number of years teaching experience at post-secondary level (including this year) ☐☐ (16-17)

Number of years in any vocational-technical program ☐☐ (18-19)

Number of years teaching experience in present assignment ☐☐ (20-21)

Number of years occupational experience related to present assignment ☐☐ (22-23)

Have you completed any of the following courses? 1. ☐ Yes 2. ☐ No (24)
Check courses you have completed.

☐ Methods of Teaching Vocational Subjects (25)

☐ Trade Analysis and Coursemaking (26)

☐ Classroom and Laboratory Management (27)

☐ Organization and Use of Instructional Materials (28)

☐ Organization and Management of Cooperative Training Programs (29)

☐ History and Principles of Vocational (Technical) Education (30)

READ THIS PAGE BEFORE GOING FURTHER

Have you completed the Background Information Section? Make sure, before you continue with this procedure.

PROCEDURE A. CHECKING TASKS OF PRESENT TEACHING ASSIGNMENT

1. As you read each task in the Task section, pages 1 through 9, place a check beside each task that you perform in your present assignment. Put your checkmark in the column headed "Check-If Done Now." When you have reached page 9, return to page 1.

2. DO NOT COMPLETE THE RIGHT-HAND COLUMN AT THIS TIME.

3. If a task that you perform is not listed anywhere in the entire list, write it on the blank page at the end of the booklet.

4. Do not confuse work you do yourself with work you supervise.

5. Remember, at this time you are to complete only the column headed "Check-If Done Now" for pages 1 through 9. Now, turn to page 1 and BEGIN.

PROCEDURE B. RATING TIME SPENT ON TASKS ON PRESENT ASSIGNMENT

1. Have you checked each task that you perform in your present assignment? Make sure, before you continue with this procedure.

2. Now you are to rate the relative amount of time you spend performing each task in your present assignment. Relative time spent means the total time you spend doing the task compared with the time you spend on each of the other tasks of your present assignment during the year.

3. Use a rating of "1" if you spend "very much below average" amount of time on a task. Use a rating of "2" for "below average" time; and so on, up to a rating of "7" if you spend "very much above average" amount of time on the task.

4. Remember, you are to rate only tasks that you have already checked in the first column of pages 1 through 9.

5. Place your rating, according to the 7-point scale, in the right-hand column, headed "Time Spent Current Assignment."

6. When you have completed all your ratings in the right-hand column of pages 1 through 9, you will have completed this Job Inventory, and you may turn it in to your Director or Dean of Vocational-Technical Education.

7. An envelope is provided for returning the Job Inventory and it may be sealed before returning it to your director who will mail it.

JOB INVENTORY

Post-Secondary Vocational-Technical Instructor's Competency List		Page 1 of 9
The task (competency) you perform now (√) In the "Time Spent" column, rate only those competencies you have checked (√) in your present assignment 1. Check (√) only those competencies which you perform in your present assignment. 2. Do not rate any competencies until you have checked (√) each competency that you perform. 3. Use numbers "1" through "7" to indicate the amount of time you spent on each competency which you have checked. (√) NOTE: If any task you perform is not listed, write it on the blank page at the end of the booklet.	Check √ IF DONE NOW	Estimated time spent on competencies in your assignment this year. 1. Very much below average 2. Below average 3. Slightly below average 4. Average 5. Slightly above average 6. Above average 7. Very much above average
PROFESSIONAL ROLE AND DEVELOPMENT		
1. identify current trends of the teaching profession. (31)	____	____
2. promote the attainment of the goals and objectives of the teaching profession. (32)	____	____
3. participate in experimental and other data collecting research activities. (33)	____	____
4. evaluate your personal and professional abilities and limitations. (34)	____	____
5. acquire new occupational skills needed to keep pace with technological advancement in your teaching field. (35)	____	____
6. supervise student teachers. (36)	____	____
SCHOOL - COMMUNITY RELATIONS		
7. provide displays in the school and in the community on the vocational program. (37)	____	____
8. direct student presentations describing activities of the vocational program. (38)	____	____
9. conduct an open house to familiarize members of the school and community with activities of the vocational program. (39)	____	____
10. sponsor student-parent activities for the vocational program. (40)	____	____

JOB INVENTORY

Post-Secondary Vocational-Technical Instructor's Competency List		Page 2 of 9
The task (competency) you perform now (√) In the "Time Spent" column, rate only those competencies you have checked (√) in your present assignment 1. Check (√) only those competencies which you perform in your present assignment. 2. Do not rate any competencies until you have checked (√) each competency that you perform. 3. Use numbers "1" through "7" to indicate the amount of time you spent on each competency which you have checked. (√)	Check √ IF DONE NOW	Estimated time spent on competencies in your assignment this year. 1. Very much below average 2. Below average 3. Slightly below average 4. Average 5. Slightly above average 6. Above average 7. Very much above average
SCHOOL - COMMUNITY RELATIONS (Continued)		
11. maintain liaison with union officials and employers. (41)	____	____
12. conduct opinion surveys in the school and community concerning the vocational program. (42)	____	____
13. analyze enrollment trends to determine student and parent acceptance of the vocational program. (43)	____	____
14. obtain informal feedback on the vocational program through contacts with individuals in the school and community. (44)	____	____
15. obtain information from parents relative to their expectations of the vocational program. (45)	____	____
16. consult advisory committee to obtain information concerning their expectations of the vocational program. (46)	____	____
17. acquire information from members of the community power structure regarding their expectations of the vocational program. (47)	____	____
18. assist in planning the overall objectives of the total school program. (48)	____	____
INSTRUCTION: EVALUATION		
19. establish criteria for evaluating student performance. (49)	____	____
20. develop criterion test. (50)	____	____
21. formulate a system of grading consistent with school policy. (51)	____	____

JOB INVENTORY

Post-Secondary Vocational-Technical Instructor's Competency List		Page 3 of 9
The task (competency) you perform now (√) In the "Time Spent" column, rate only those competencies you have checked (√) in your present assignment 1. Check (√) only those competencies which you perform in your present assignment. 2. Do not rate any competencies until you have checked (√) each competency that you perform. 3. Use numbers "1" through "7" to indicate the amount of time you spent on each competency which you have checked. (√)	Check √ IF DONE NOW	Estimated time spent on competencies in your assignment this year. 1. Very much below average 2. Below average 3. Slightly below average 4. Average 5. Slightly above average 6. Above average 7. Very much above average
INSTRUCTION: EVALUATION (Continued)		
22. appraise students' performance in relation to performance objectives. (52)	____	____
23. evaluate student-learner's work qualities, personal traits, and progress on the job. (53)	____	____
24. devise self-evaluation techniques for use by students. (54)	____	____
PROGRAM PLANNING, DEVELOPMENT, AND EVALUATION		
25. organize a steering committee to assist in the pre-planning activities of an occupational survey. (55)	____	____
26. identify the geographical area in which an occupational survey will be conducted. (56)	____	____
27. appoint and involve advisory committee in conducting an occupational survey. (57)	____	____
28. collect occupational data from employers to identify occupational standards. (58)	____	____
29. identify the role and function of the advisory committee. (59)	____	____
30. plan the annual agenda to be considered by the advisory committee. (60)	____	____
31. assist in the identification of the vocational education purposes and objectives for the school. (61)	____	____
32. analyze occupations with assistance of employers and labor representatives. (62)	____	____

JOB INVENTORY

Post-Secondary Vocational-Technical Instructor's Competency List			Page 4 of 9
The task (competency) you perform now (√) In the "Time Spent" column, rate only those competencies you have checked (√) in your present assignment 1. Check (√) only those competencies which you perform in your present assignment. 2. Do not rate any competencies until you have checked (√) each competency that you perform. 3. Use numbers "1" through "7" to indicate the amount of time you spent on each competency which you have checked. (√)		Check √ IF DONE NOW	Estimated time spent on competencies in your assignment this year. 1. Very much below average 2. Below average 3. Slightly below average 4. Average 5. Slightly above average 6. Above average 7. Very much above average
PROGRAM PLANNING, DEVELOPMENT, AND EVALUATION (Continued)			
33. identify the competencies needed for entry into an occupation.	(63)	____	____
34. assist in writing general objectives for courses offered in the vocational education program.	(64)	____	____
35. write student performance goals for vocational education courses.	(65)	____	____
36. maintain continual follow-up information on placement, employment, and training status of each graduate of the vocational program.	(66)	____	____
37. disseminate a summary of the vocational education evaluation to administrators, advisory committee members, and the board of education.	(67)	____	____
INSTRUCTION: PLANNING			
38. make a job analysis for determination of instructional content in the course taught.	(68)	____	____
39. develop a course of study.	(69)	____	____
40. determine group and individual learning experiences for the unit based on individual differences of students.	(70)	____	____
41. prepare a lesson plan.	(71)	____	____
42. identify textbook, reference, and other instructional material.	(72)	____	____
43. develop original instructional materials.	(73)	____	____

JOB INVENTORY

Post-Secondary Vocational-Technical Instructor's Competency List		Page 5 of 9
The task (competency) you perform now (✓) In the "Time Spent" column, rate only those competencies you have checked (✓) in your present assignment 1. Check (✓) only those competencies which you perform in your present assignment. 2. Do not rate any competencies until you have checked (✓) each competency that you perform. 3. Use numbers "1" through "7" to indicate the amount of time you spent on each competency which you have checked. (✓)	Check ✓ IF DONE NOW	Estimated time spent on competencies in your assignment this year. 1. Very much below average 2. Below average 3. Slightly below average 4. Average 5. Slightly above average 6. Above average 7. Very much above average
INSTRUCTION: EXECUTION		
44. conduct field trips. (74)	____	____
45. provide students with opportunities to become experienced in manipulative skills. (75)	____	____
46. teach lesson using conference technique. (76)	____	____
47. teach lesson by the project or job method. (77)	____	____
48. provide students with opportunities to apply new information while under supervision of instructor. (78)	____	____
49. obtain summary for a lesson. (79)	____	____
50. provide instruction so that students can progress at own rate of speed. [1] (80) Dup. 1-30 (31)	____	____
51. teach a demonstration lesson. (32)	____	____
52. give a lecture. (33)	____	____
53. give an illustrated talk. (34)	____	____
MANAGEMENT		
54. prepare a capital outlay budget proposal for new equipment needed in a vocational course. (35)	____	____
55. plan an operating budget proposal for consumable supplies, services, and materials needed in a vocational course. (36)	____	____

JOB INVENTORY

Post-Secondary Vocational-Technical Instructor's Competency List		Page 6 of 9
The task (competency) you perform now (√) In the "Time Spent" column, rate only those competencies you have checked (√) in your present assignment 1. Check (√) only those competencies which you perform in your present assignment. 2. Do not rate any competencies until you have checked (√) each competency that you perform. 3. Use numbers "1" through "7" to indicate the amount of time you spent on each competency which you have checked. (√)	Check √ IF DONE NOW	Estimated time spent on competencies in your assignment this year. 1. Very much below average 2. Below average 3. Slightly below average 4. Average 5. Slightly above average 6. Above average 7. Very much above average
MANAGEMENT (Continued)		
56. prepare purchase request for approved vocational equipment and supplies. (37)	____	____
57. structure a filing system for records and report forms used in a vocational course. (38)	____	____
58. supply administrators with data for vocational reports required by the state department of education. (39)	____	____
59. provide approved safety apparel and devices for vocational students assigned to hazardous equipment. (40)	____	____
60. maintain a record of safety instruction presented in compliance with safety laws and regulations. (41)	____	____
61. uphold acceptable standards of student behavior in vocational classrooms and laboratories. (42)	____	____
62. maintain an inventory of vocational tools, supplies, and equipment assigned to the laboratory. (43)	____	____
63. establish a system for repairing and servicing tools and equipment in a vocational laboratory. (44)	____	____
64. arrange for the storage and security of vocational supplies and equipment. (45)	____	____
65. implement student "check-out" procedures for tools, supplies, and equipment used in the vocational laboratory. (46)	____	____
66. schedule laboratory equipment for maximum utilization by students. (47)	____	____

JOB INVENTORY

Post-Secondary Vocational-Technical Instructor's Competency List			Page 8 of 9
The task (competency) you perform now (√) In the "Time Spent" column, rate only those competencies you have checked (√) in your present assignment 1. Check (√) only those competencies which you perform in your present assignment. 2. Do not rate any competencies until you have checked (√) each competency that you perform. 3. Use numbers "1" through "7" to indicate the amount of time you spent on each competency which you have checked. (√)		Check √ IF DONE NOW	Estimated time spent on competencies in your assignment this year. 1. Very much below average 2. Below average 3. Slightly below average 4. Average 5. Slightly above average 6. Above average 7. Very much above average
GUIDANCE (Continued)			
78. present information to students on post-high school training and educational opportunities available to them.	(59)	____	____
79. assist students in securing and in filling out applications for jobs, scholarships, educational loans, or college admission.	(60)	____	____
COORDINATION (To be completed by Teacher-Coordinators of Cooperative Training Programs)			
80. establish criteria for selection of student-learners.	(61)	____	____
81. provide prospective student-learners with resource materials on occupational opportunities to aid them in selecting a vocation.	(62)	____	____
82. identify a prospective student-learner on basis of selection criteria and data.	(63)	____	____
83. match a student-learner's unique characteristics with an appropriate training station.	(64)	____	____
84. select student-learner training stations.	(65)	____	____
85. arrange with a union to make contract provision for student-learners.	(66)	____	____
86. establish criteria to evaluate and approve training stations.	(67)	____	____

JOB INVENTORY

Post-Secondary Vocational-Technical Instructor's Competency List		Page 9 of 9
The task (competency) you perform now (√) In the "Time Spent" column, rate only those competencies you have checked (√) in your present assignment 1. Check (√) only those competencies which you perform in your present assignment. 2. Do not rate any competencies until you have checked (√) each competency that you perform. 3. Use numbers "1" through "7" to indicate the amount of time you spent on each competency which you have checked. (√)	Check √ IF DONE NOW	Estimated time spent on competencies in your assignment this year. 1. Very much below average 2. Below average 3. Slightly below average 4. Average 5. Slightly above average 6. Above average 7. Very much above average
COORDINATION (Continued)		
87. assess training capability of the prospective training station. (68)	____	____
88. assess educational adequacy of a prospective training station's facilities and equipment. (69)	____	____
89. assess safety provision of facilities and equipment of the prospective training stations. (70)	____	____
90. develop systematic training plan and agreement. (71)	____	____
91. supervise student-learner's on-the-job experience. (72)	____	____
92. develop a training plan for student-learner with employer. (73)	____	____
93. sponsor employer/student-learner banquet for the vocational program. (74)	____	____
94. obtain from advisory committee information on ways to improve related instruction and on-the-job training. (75)	____	____
2 (80)		

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